

**AAOS**

AMERICAN ACADEMY OF  
ORTHOPAEDIC SURGEONS



# Supplement to the Clinical Practice Guideline for Pharmacologic, Physical, and Cognitive Pain Alleviation for Musculoskeletal Extremity/Pelvis Surgery

## e-Appendix 1

- PICO Questions/Inclusion Criteria
- Search Strategy
- Excluded Literature
- AAOS Approval Bodies
- Review Organizations
- Letters of Endorsement from External Organizations

This supplementary material has been provided by the authors to give readers additional information about their work.

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## **PICO Questions and Inclusion Criteria**

### **PICO Questions**

1. In adult (>17) patients being surgically treated for musculoskeletal extremity/pelvis conditions, do physical treatment options (Cryotherapy, TENS, motion, etc.) improve patient outcomes?
2. In adult (>17) patients being surgically treated for musculoskeletal extremity/pelvis conditions, do peri-operative injection treatments improve patient outcomes?
3. In adult (>17) patients being surgically treated for musculoskeletal extremity/pelvis conditions, do cognitive/behavioral treatment options improve patient outcomes?
4. In adult (>17) patients being surgically treated for musculoskeletal extremity/pelvis conditions, do opioids improve patient outcomes?
5. In adult (>17) patients being surgically treated for musculoskeletal extremity/pelvis conditions, do anti-depressant improve patient outcomes?
6. In adult (>17) patients being surgically treated for musculoskeletal extremity/pelvis conditions, do NSAIDs improve patient outcomes?
7. In adult (>17) patients being surgically treated for musculoskeletal extremity/pelvis conditions, does acetaminophen improve patient outcomes?
8. In adult (>17) patients being surgically treated for musculoskeletal extremity/pelvis conditions, do acetaminophen/NSAID combination treatments improve patient outcomes?
9. In adult (>17) patients being surgically treated for musculoskeletal extremity/pelvis conditions, do gabapentinoids improve patient outcomes?
10. In adult (>17) patients being surgically treated for musculoskeletal extremity/pelvis conditions, does ketamine improve patient outcomes?
11. In adult (>17) patients being surgically treated for musculoskeletal extremity/pelvis conditions, do muscle relaxants/anxiolytics improve patient outcomes?

### Standard Inclusion Criteria

- Article must be a full article report of a clinical study (studies using registry data can be included in a guideline if it is published in a peer-reviewed journal and meets all other inclusion criteria/quality standards).
- **Non-comparative case series/incidence/prevalence studies**, meeting abstracts, historical articles, editorials, letters, and commentaries are *excluded*.
- Controlled trials in which patients were not stochastically assigned to groups AND in which there was either a difference in patient characteristics or outcomes at baseline AND where the authors did not statistically adjust for these differences when analyzing the results are *excluded*.
- All studies of “**Very Low**” quality of evidence (e.g. Level V) are *excluded*.
- Study must appear in a peer-reviewed publication
- Study must be of humans
- Study must be published in English
- Study results must be quantitatively presented
- Study must not be an in vitro study
- Study must not be a biomechanical study
- Study must not have been performed on cadavers

### Customized Inclusion Criteria

- Study must be of a **musculoskeletal surgical treatment**
- Study must be published in or after **2010 (PHARM ONLY – Re-assess extending if return is <20 includes)**
- Study must be published in or after **1990 (Non-Pharm Cognitive/Physical)**
- Study must be published in or after **2000 (Non-Pharm Peri-op injections)**
- Studies should have **30 or more patients** per group (excluding injectables)
- Studies should have **20 or more patients** per group for injectables
- Treatment should be **Admission to 90 days**
- Patient outcome follow-up times should be **Admission to 90 days (unlimited for chronic pain, function, non-union, opioid use disorder)**

## **Literature Search Strategy**

### **Literature Search Method**

The medical librarian conducted a comprehensive search of MEDLINE, Embase, and the Cochrane Central Register of Controlled Trials based on key terms and concepts from the workgroup-defined PICO questions. Bibliographies of relevant systematic reviews were hand searched for additional references. All databases were last searched on June 2, 2020 with limits for publication dates and English language.

### **For PRISMA diagram**

Records identified through database searching: 21,464

Records after duplicates removed: 9,098

Additional records identified through other sources: 32

Records screened: 9,130

### **Appendix: Literature Search Strategies by Database**

**Database:** PubMed

**Interface:** NCBI (<https://www.ncbi.nlm.nih.gov/pubmed>)

**Date Last Searched:** June 2, 2020

**LINE SEARCH SYNTAX**

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1

"Orthopedic Procedures"[Mesh:NoExp] OR ("Arthroplasty"[mh] NOT ("Total Disc Replacement"[mh] OR "Arthroplasty, Replacement, Finger"[mh])) OR "Cementoplasty"[Mesh:NoExp] OR "Arthrodesis"[Mesh:NoExp] OR "Amputation"[mh] OR ("Bone Lengthening"[mh] NOT ("Orthognathic Surgical Procedures"[mh] OR "Mandible"[mh] OR mandible[tiab] OR mandibular[tiab])) OR "Acetabuloplasty"[mh] OR "Arthroscopy"[mh] OR "Fracture Fixation"[mh] OR "Limb Salvage"[mh] OR "Meniscectomy"[mh] OR "Osteotomy"[Mesh:NoExp] OR "Synovectomy"[mh] OR "Tendon Transfer"[mh] OR "Tenodesis"[mh] OR "Tenotomy"[mh] OR "Ulnar Collateral Ligament Reconstruction"[mh] OR "Fasciotomy"[mh] OR orthopedic\*[tiab] OR orthopaedic\*[tiab] OR arthroplast\*[tiab] OR hemiarthroplast\*[tiab] OR arthroscop\*[tiab] OR osteotomy[tiab] OR osteotomies[tiab] OR osteoplasty[tiab] OR chondroplasty[tiab] OR osteochondroplasty[tiab] OR tenotomy[tiab] OR tenotomies[tiab] OR tenodesis[tiab] OR meniscectomy[tiab] OR synovectomy[tiab] OR tenosynovectomy[tiab] OR tendoscopy[tiab] OR arthroereisis[tiab] OR fixat\*[tiab] OR arthrodesis[tiab] OR salvag\*[tiab] OR amputat\*[tiab] OR acetabuloplasty[tiab] OR "hip replacement"[tiab] OR "hip replacements"[tiab] OR "knee replacement"[tiab] OR ("joint replacement"[tiab] NOT temporomandibular[tiab]) OR "ankle replacement"[tiab] OR "shoulder replacement"[tiab] OR "elbow replacement"[tiab] OR "femoral replacement"[tiab] OR "ankle fusion"[tiab] OR (release[tiab] AND "carpal tunnel"[tiab]) OR resurfacing[tiab] OR hemipelvectomy[tiab] OR repair\*[tiab] OR reconstruct\*[tiab] OR Latarjet[tiab] OR Ilizarov[tiab] OR "open reduction"[tiab] OR microfracture[tiab] OR arthrotomy[tiab] OR fasciotomy[tiab] OR nailing[tiab] OR plating[tiab] OR ((surgery[tiab] OR surgical[tiab] OR surgically[tiab] OR operative\*[tiab] OR perioperative\*[tiab] OR "peri operative"[tiab] OR "peri operatively"[tiab] OR preoperative\*[tiab] OR "pre operative"[tiab] OR "pre operatively"[tiab] OR postoperative\*[tiab] OR "post operative"[tw] OR "post operatively"[tiab] OR intraoperative\*[tiab] OR "intra operative"[tiab] OR "intra operatively"[tiab]) AND (fractur\*[tiab] OR avuls\*[tiab] OR injur\*[tiab] OR "Fractures, Bone"[Mesh:NoExp] OR "Fracture Dislocation"[mh] OR "Fractures, Avulsion"[mh] OR "Fractures, Closed"[mh] OR "Fractures, Comminuted"[mh] OR "Fractures, Compression"[mh] OR "Fractures, Malunited"[mh] OR "Fractures, Multiple"[mh] OR "Fractures, Open"[mh] OR "Fractures, Spontaneous"[mh] OR "Fractures, Stress"[mh] OR "Fractures, Ununited"[mh] OR "Intra-Articular Fractures"[mh] OR "Osteoporotic Fractures"[mh] OR "Periprosthetic Fractures"[mh] OR "Wounds and Injuries"[Mesh:NoExp] OR "Athletic Injuries"[mh] OR "Blast Injuries"[mh] OR "Crush Injuries"[mh] OR "Amputation, Traumatic"[mh] OR "Multiple Trauma"[mh] OR "Shock, Traumatic"[mh] OR "Soft Tissue Injuries"[mh] OR "Sprains and Strains"[mh] OR "Tendon Injuries"[mh] OR "War-Related Injuries"[mh] OR "Ankle Fractures"[mh] OR "Humeral Fractures"[mh] OR "Radius Fractures"[mh] OR "Shoulder Fractures"[mh] OR "Ulna Fractures"[mh] OR "Arm Injuries"[mh] OR "Hip Injuries"[mh] OR "Leg Injuries"[mh] OR "Shoulder Injuries"[mh] OR (strain\*[tiab] AND (Tendons[mh] OR "Muscle, Skeletal"[mh] OR muscle\*[tiab] OR tendon\*[tiab])) OR tear[tiab] OR tears[tiab] OR tearing[tiab] OR torn[tiab] OR trauma[tiab] OR traumatic[tiab] OR (ruptur\*[tiab] AND (Tendons[mh] OR tendon\*[tiab] OR "Ligaments, Articular"[mh])) OR wound\*[tiab]))

- 2 "Extremities"[mh] OR "Bones of Lower Extremity"[mh] OR "Bones of Upper Extremity"[mh] OR "Hip Joint"[mh] OR "Knee Joint"[mh] OR "Anterior Cruciate Ligament"[mh] OR "Posterior Cruciate Ligament"[mh] OR "Collateral Ligaments"[mh] OR "Ankle Joint"[mh] OR "Tarsal Joints"[mh] OR "Shoulder Joint"[mh] OR "Acromioclavicular Joint"[mh] OR "Sternoclavicular Joint"[mh] OR "Elbow Joint"[mh] OR "Wrist Joint"[mh] OR "Carpal Joints"[mh] OR "Achilles Tendon"[mh] OR "Hamstring Tendons"[mh] OR "Rotator Cuff"[mh] OR "Ankle Fractures"[mh] OR "Humeral Fractures"[mh] OR "Radius Fractures"[mh] OR "Shoulder Fractures"[mh] OR "Ulna Fractures"[mh] OR "Arm Injuries"[mh] OR "Hip Injuries"[mh] OR "Leg Injuries"[mh] OR "Shoulder Injuries"[mh] OR extremity[tiab] OR extremities[tiab] OR limb[tiab] OR "long bone"[tiab] OR "long bones"[tiab] OR leg[tiab] OR hip[tiab] OR pelvic[tiab] OR acetabulum[tiab] OR acetabular[tiab] OR femoroacetabular[tiab] OR labral[tiab] OR knee[tiab] OR femur[tiab] OR femoral[tiab] OR trochanter\*[tiab] OR intertrochanter\*[tiab] OR subtrochanter\*[tiab] OR pertrochanter\*[tiab] OR tibia[tiab] OR tibial[tiab] OR hamstring[tiab] OR (quadriceps[tiab] AND (tendon[tiab] OR ruptur\*[tiab])) OR ("rectus femoris"[tiab] AND (tendon[tiab] OR strain\*[tiab] OR ruptur\*[tiab])) OR patella[tiab] OR patellar[tiab] OR patellofemoral[tiab] OR "anterior cruciate"[tiab] OR ACL[tiab] OR "posterior cruciate"[tiab] OR menisc\*[tiab] OR ankle[tiab] OR Achilles[tiab] OR subtalar[tiab] OR hindfoot[tiab] OR calcaneal[tiab] OR talus[tiab] OR talar[tiab] OR tarsometatarsal[tiab] OR Lisfranc[tiab] OR malleolus[tiab] OR malleolar[tiab] OR foot[tiab] OR arm[tiab] OR forearm[tiab] OR shoulder[tiab] OR glenohumeral[tiab] OR glenoid[tiab] OR "rotator cuff"[tiab] OR acromioclavicular[tiab] OR subscapularis[tiab] OR supraspinatus[tiab] OR humerus[tiab] OR humeral[tiab] OR (pectoralis[tiab] AND (tendon[tiab] OR "Rupture/surgery"[Mesh:NoExp])) OR biceps[tiab] OR triceps[tiab] OR clavicle[tiab] OR elbow[tiab] OR elbows[tiab] OR radius[tiab] OR radial[tiab] OR ulna[tiab] OR ulnar[tiab] OR olecranon[tiab] OR wrist[tiab] OR carpal[tiab] OR Colles\*[tiab] OR Monteggia\*[tiab] OR Torus[tiab] OR scaphoid[tiab] OR "total joint"[tiab] OR THA[tiab] OR TKA[tiab]
- 3 #1 AND #2
- 4 Cryotherapy[mh] OR Ice[mh] OR "Hot Temperature/therapeutic use"[mh] OR "Electric Stimulation Therapy"[mh] OR "Early Ambulation"[mh] OR "Acupuncture Therapy"[mh] OR Massage[mh] OR "Motion Therapy, Continuous Passive"[mh] OR cryotherapy[tiab] OR cryotherapies[tiab] OR "cold therapy"[tiab] OR ice[tiab] OR cooling[tiab] OR warming[tiab] OR heating[tiab] OR TENS[tiab] OR NMES[tiab] OR ((electric[tiab] OR electrical[tiab]) AND stimulat\*[tiab]) OR electrostimulation[tiab] OR electrotherapy[tiab] OR "nerve stimulation"[tiab] OR "muscle stimulation"[tiab] OR ((early[tiab] OR accelerated[tiab] OR immediate[tiab]) AND (ambulat\*[tiab] OR walking[tiab] OR mobilization[tiab] OR mobilisation[tiab] OR motion[tiab] OR weightbearing[tiab] OR "weight bearing"[tiab] OR rehabilitation[tiab])) OR acupuncture[tiab] OR pharmacoacupuncture[tiab] OR acupotomy[tiab] OR auriculotherapy[tiab] OR "dry needling"[tiab] OR massag\*[tiab] OR "continuous passive motion"[tiab]
- 5 "Anesthesia, Conduction"[mh] OR "nerve block"[tiab] OR "nerve blocks"[tiab] OR "nerve blockade"[tiab] OR "nerve blockades"[tiab] OR IPACK[tiab] OR "plexus block"[tiab] OR "plexus blocks"[tiab] OR "plexus blockade"[tiab] OR "plexus blockades"[tiab] OR "neuraxial block"[tiab] OR "neuraxial blocks"[tiab] OR "neuraxial blockade"[tiab] OR "neuraxial blockades"[tiab] OR "adductor canal block"[tiab] OR "adductor canal blocks"[tiab] OR "adductor canal blockade"[tiab] OR "fascia iliaca compartment block"[tiab] OR "fascia iliaca

	<p>compartment blocks"[tiab] OR "fascia iliaca compartment blockade"[tiab] OR "fascia iliaca block"[tiab] OR "fascia iliaca blocks"[tiab] OR "fascia iliaca blockade"[tiab] OR "paravertebral block"[tiab] OR "paravertebral blocks"[tiab] OR "paravertebral blockade"[tiab] OR "paravertebral blockades"[tiab] OR "spinal anaesthesia"[tiab] OR "spinal anesthesia"[tiab] OR "spinal anaesthetic"[tiab] OR "spinal anaesthetics"[tiab] OR "spinal anesthetic"[tiab] OR "spinal anesthetics"[tiab] OR "spinal analgesia"[tiab] OR "subarachnoid block"[tiab] OR "subarachnoid anesthesia"[tiab] OR "subarachnoid anaesthesia"[tiab] OR "epidural anaesthesia"[tiab] OR "epidural anesthesia"[tiab] OR "regional anesthesia"[tiab] OR "regional anesthetic"[tiab] OR "regional anaesthesia"[tiab] OR "regional anaesthetic"[tiab] OR "local anesthesia"[tiab] OR "local anesthetic"[tiab] OR "local anesthetics"[tiab] OR "local anaesthesia"[tiab] OR "local anaesthetic"[tiab] OR "local anaesthetics"[tiab] OR "peri-articular infiltration"[tiab] OR "periarticular infiltration"[tiab] OR "peri-articular injection"[tiab] OR "peri-articular injections"[tiab] OR "periarticular injection"[tiab] OR "periarticular injections"[tiab] OR "interscalene block"[tiab] OR "interscalene blocks"[tiab] OR "interscalene blockade"[tiab] OR "infiltration anesthesia"[tiab] OR "infiltration analgesia"[tiab] OR "infiltrative analgesia"[tiab] OR "lidocaine"[tiab] OR "ropivacaine"[tiab] OR "bupivacaine"[tiab] OR "ketorolac"[tiab] OR "tromethamine"[tiab] OR "epinephrine"[tiab] OR "nerve catheter"[tiab] OR "nerve catheters"[tiab] OR "perineural catheter"[tiab] OR "perineural catheters"[tiab]</p>
6	<p>"Adrenal Cortex Hormones"[mh] OR "adrenal cortex hormones"[tiab] OR corticosteroid*[tiab] OR "cortico steroid"[tiab] OR corticoid*[tiab] OR cortisone[tiab] OR prednisone[tiab] OR prednisolone[tiab] OR methylprednisolone[tiab] OR triamcinolone[tiab] OR dexamethasone[tiab] OR glucocorticoid*[tiab] OR cortisone[tiab] OR hydrocortisone[tiab] OR betamethasone[tiab] OR budesonide[tiab] OR mineralocorticoid*[tiab]</p>
7	<p>"Anti-Inflammatory Agents, Non-Steroidal"[mh] OR "Cyclooxygenase 2 Inhibitors"[mh] OR "non-steroidal anti-inflammatory agent"[tiab] OR "nonsteroidal anti-inflammatory agents"[tiab] OR meloxicam[tiab] OR Mobic[tiab] OR naproxen[tiab] OR Aleve[tiab] OR ibuprofen[tiab] OR Advil[tiab] OR flurbiprofen[tiab] OR ketorolac[tiab] OR Toradol[tiab] OR "COX-2 inhibitor"[tiab] OR "COX-2 inhibitors"[tiab] OR "COX2 inhibitor"[tiab] OR "COX2 inhibitors"[tiab] OR "cyclooxygenase 2 inhibitor"[tiab] OR "cyclo oxygenase inhibitor"[tiab] OR celecoxib[tiab] OR Celebrex[tiab] OR diclofenac[tiab] OR misoprostol[tiab] OR sulindac[tiab] OR ketoprofen[tiab] OR tolmetin[tiab] OR etodolac[tiab] OR fenoprofen[tiab] OR piroxicam[tiab] OR indomethacin[tiab] OR nabumetone[tiab] OR aspirin[tiab] OR etoricoxib[tiab]</p>
8	<p>"Injections, Intra-Articular"[Mesh:NoExp] OR inject*[tiab] OR infiltration*[tiab] OR "intra articular"[tiab] OR intraarticular[tiab] OR "peri articular"[tiab] OR periarticular[tiab]</p>
9	<p>((#6 OR #7) AND #8) OR #5</p>



- 10 Psychotherapy[mh] OR "Patient Education as Topic"[mh] OR "Health Education"[mh] OR psychotherapy[tiab] OR psychotherapies[tiab] OR psychotherapeutic[tiab] OR ((cogniti\*[tiab] OR behavior\*[tiab] OR behaviour\*[tiab]) AND (therapy[tiab] OR therapies[tiab] OR treatment\*[tiab] OR intervention\*[tiab])) OR (CBT[tiab] NOT ("cord blood transplantation"[tiab] OR "carotid body tumor"[tiab] OR "cortical bone trajectory"[tiab] OR "cortical bone thickness"[tiab] OR "computer based training"[tiab])) OR ("virtual reality"[tiab] AND (therapy[tiab] OR therapies[tiab] OR treatment\*[tiab] OR intervention\*[tiab] OR rehabilitation[tiab])) OR "mirror therapy"[tiab] OR "visual feedback"[tiab] OR "mirror feedback"[tiab] OR ((sensorimotor[tiab] OR "sensori motor"[tiab] OR "sensory"[tiab]) AND (feedback[tiab] OR training[tiab] OR rehabilitation[tiab])) OR (music[tiab] AND (therapy[tiab] OR therapies[tiab] OR treatment\*[tiab] OR intervention\*[tiab])) OR "guided imagery"[tiab] OR "motor imagery"[tiab] OR Reiki[tiab] OR hypnosis[tiab] OR mindfulness[tiab] OR meditat\*[tiab] OR education\*[ti] OR teaching[ti]
- 11 Narcotics[mh] OR Tramadol[mh] OR narcotic\*[tiab] OR opioid\*[tiab] OR opiate\*[tiab] OR papaver\*[tiab] OR oxycodone[tiab] OR Oxycontin[tiab] OR "Oxy-ER"[tiab] OR "Oxy-CRF"[tiab] OR "OxyIR"[tiab] OR "Oxy-IR"[tiab] OR Percodan[tiab] OR Percocet[tiab] OR Roxicet[tiab] OR hydrocodone[tiab] OR dihydrocodeinone[tiab] OR Vicodin[tiab] OR Vicoprofen[tiab] OR Norco[tiab] OR Lortab[tiab] OR Lorcet[tiab] OR oxymorphone[tiab] OR Opana[tiab] OR morphine[tiab] OR Kadian[tiab] OR Avinza[tiab] OR "MS Contin"[tiab] OR Duramorph[tiab] OR Roxanol[tiab] OR codeine[tiab] OR fentanyl[tiab] OR Duragesic[tiab] OR Actiq[tiab] OR Sublimaze[tiab] OR hydromorphone[tiab] OR Dilaudid[tiab] OR meperidine[tiab] OR Demerol[tiab] OR tramadol[tiab] OR Ultram[tiab] OR buprenorphine[tiab] OR propoxyphene[tiab] OR Darvocet[tiab] OR Omnopon[tiab] OR methadone[tiab] OR Dolophine[tiab] OR Methadose[tiab] OR suboxone[tiab] OR nalbuphine[tiab] OR propoxyphene[tiab] OR pentazocine[tiab]
- 12 "Antidepressive Agents"[mh] OR "Serotonin and Noradrenaline Reuptake Inhibitors"[mh] OR "Monoamine Oxidase Inhibitors"[mh] OR "Serotonin Uptake Inhibitors"[mh] OR "Dopamine Uptake Inhibitors"[mh] OR antidepressant[tiab] OR antidepressants[tiab] OR "anti depressant"[tiab] OR "anti depressants"[tiab] OR SNRI\*[tiab] OR (serotonin[tiab] AND (norepinephrine[tiab] OR noradrenaline[tiab] OR antagonist[tiab]) AND inhibitor\*[tiab]) OR duloxetine[tiab] OR desvenlafaxine[tiab] OR levomilnacipran[tiab] OR venlafaxine[tiab] OR nefazodone[tiab] OR trazodone[tiab] OR SSRI\*[tiab] OR (selective[tiab] AND serotonin[tiab] AND inhibitor\*[tiab]) OR citalopram[tiab] OR escitalopram[tiab] OR fluoxetine[tiab] OR fluvoxamine[tiab] OR paroxetine[tiab] OR sertraline[tiab] OR vilazodone[tiab] OR (monoamine[tiab] AND oxidase[tiab] AND inhibitor\*[tiab]) OR MAOI[tiab] OR MAOIs[tiab] OR isocarboxazid[tiab] OR phenelzine[tiab] OR tranylcypromine[tiab] OR NDRI\*[tiab] OR (norepinephrine[tiab] AND dopamine[tiab] AND inhibitor\*[tiab]) OR bupropion[tiab] OR amitriptyline[tiab] OR clomipramine[tiab] OR desipramine[tiab] OR doxepin[tiab] OR imipramine[tiab] OR nortriptyline[tiab] OR protriptyline[tiab] OR trimipramine[tiab] OR amoxapine[tiab] OR maprotiline[tiab] OR mirtazapine[tiab] OR vortioxetine[tiab]
- 13 "Acetaminophen"[mh] OR acetaminophen[tiab] OR paracetamol[tiab] OR Tylenol[tiab] OR propacetamol[tiab]
- 14 "Pregabalin"[mh] OR "Gabapentin"[mh] OR gabapentin[tiab] OR gabapentinoid\*[tiab] OR Neurontin[tiab] OR Gralise[tiab] OR Horizant[tiab] OR pregabalin[tiab] OR Lyrica[tiab]

15	Ketamine[mh] OR ketamine[tiab] OR Ketalar[tiab] OR Ketaject[tiab] OR katamine[tiab] OR Calipsol[tiab] OR Calypsol[tiab] OR Imalgene[tiab] OR Kalipsol[tiab] OR Ketanest[tiab] OR Vetalar[tiab] OR Ketamin[tiab] OR Ketamina[tiab]
16	"Neuromuscular Agents"[mh] OR "Succinylcholine"[mh] OR "Rocuronium"[mh] OR "Mivacurium"[mh] OR "Pancuronium"[mh] OR "Benzodiazepines"[mh] OR "Hydroxyzine"[Mesh:NoExp] OR "muscle relaxant"[tiab] OR "muscle relaxants"[tiab] OR abobotulinumtoxinA[tiab] OR baclofen[tiab] OR Botox[tiab] OR carisoprodol[tiab] OR chlorzoxazone[tiab] OR cyclobenzaprine[tiab] OR Dantrium[tiab] OR dantrolene[tiab] OR Dysport[tiab] OR Flexeril[tiab] OR incobotulinumtoxinA[tiab] OR Lioresal[tiab] OR metaxalone[tiab] OR methocarbamol[tiab] OR Myobloc[tiab] OR Norflex[tiab] OR onabotulinumtoxinA[tiab] OR orphenadrine[tiab] OR Parafon[tiab] OR rimabotulinumtoxinB[tiab] OR Robaxin[tiab] OR Skelaxin[tiab] OR tizanidine[tiab] OR Xeomin[tiab] OR atracurium[tiab] OR cisatracurium[tiab] OR mivacurium[tiab] OR pancuronium[tiab] OR rocuronium[tiab] OR succinylcholine[tiab] OR vecuronium[tiab] OR Norgesic[tiab] OR quazepam[tiab] OR chlordiazepoxide[tiab] OR flurazepam[tiab] OR alprazolam[tiab] OR diazepam[tiab] OR oxazepam[tiab] OR clonazepam[tiab] OR estazolam[tiab] OR clorazepate[tiab] OR triazolam[tiab] OR lorazepam[tiab] OR temazepam[tiab] OR clobazam[tiab] OR midazolam[tiab] OR Doral[tiab] OR Valium[tiab] OR Versed[tiab] OR hydroxyzine[tiab]
17	(1990:3000[pdat]) AND English[la]
18	(2000:3000[pdat]) AND English[la]
19	(2005:3000[pdat]) AND English[la]
20	(2010:3000[pdat]) AND English[la]
21	"randomized controlled trial"[pt] OR "Randomized Controlled Trials as Topic"[mh] OR "random allocation"[mh] OR random*[tiab]
22	MEDLINE[tiab] OR (systematic*[tiab] AND review*[tiab]) OR "meta analysis"[tiab] OR "meta-analysis"[pt] OR systematic review[pt]
23	#21 or #22
24	("animals"[mh] NOT "humans"[mh]) OR "cadaver"[mh] OR cadaver*[tiab] OR "in vitro"[tiab] OR animal*[ti] OR dog[ti] OR dogs[ti] OR canine[ti] OR horse[ti] OR horses[ti] OR equine[ti] OR mouse[ti] OR mice[ti] OR rat[ti] OR rats[ti] OR rabbit[ti] OR rabbits[ti] OR sheep[ti] OR porcine[ti] OR pig[ti] OR pigs[ti] OR rodent*[ti] Or monkey*[ti] OR ((comment[pt] OR editorial[pt] OR letter[pt] OR "historical article"[pt]) NOT "clinical trial"[pt]) OR abstracts[ti] OR editorial[ti] OR reply[ti] OR commentary[ti] OR letter[ti] OR address[pt] OR news[pt] OR "newspaper article"[pt] OR pmcbook OR "case report"[ti] OR "case reports"[pt]
25	((Infant[mh] OR Child[mh] OR pediatric*[ti] OR paediatric*[ti] OR child[ti] OR children[ti]) NOT (Adult[mh] OR Adolescent[mh] OR Adult[ti]))
26	#24 OR #25
27	((#4 OR #10) AND #3) AND #17
28	(#9 AND #3) AND #18

29	((#12 OR #14 OR #15 OR #16) AND #3) AND #19
30	((#7 OR #11 OR #13) AND #3) AND #20
31	((#27 OR #28 OR #29 OR #30) AND #23) NOT #26

**Database:** Embase

**Interface:** Elsevier (<https://embase.com>)

**Date Last Searched:** June 2, 2020

LINE	SEARCH QUERY
1	<p>orthopedic surgery'/de OR ('amputation'/exp NOT ('thumb amputation'/de OR 'finger amputation'/de)) OR 'bone resection'/de OR 'bone transplantation'/exp OR 'cartilage transplantation'/exp OR 'cementoplasty'/de OR ('distraction osteogenesis'/de NOT ('mandible'/de OR mandible:ti,ab OR mandibular:ti,ab OR 'maxilla'/de OR maxilla:ti,ab OR maxillary:ti,ab OR maxillomandibular:ti,ab OR 'temporomandibular joint disorder'/de OR temporomandibular:ti,ab OR 'orthognathic surgery'/exp OR orthognathic:ti,ab OR maxillofacial:ti,ab OR alveolar:ti,ab)) OR 'fasciotomy'/de OR 'foot surgery'/de OR 'fracture treatment'/de OR 'fracture fixation'/exp OR 'fracture reduction'/de OR 'hemipelvectomy'/de OR 'joint surgery'/de OR 'arthrodesis'/de OR 'ankle arthrodesis'/de OR 'subtalar arthrodesis'/de OR 'arthrolysis'/de OR 'arthroplasty'/de OR 'ankle arthroplasty'/exp OR 'elbow arthroplasty'/exp OR 'replacement arthroplasty'/de OR 'hemiarthroplasty'/exp OR 'total arthroplasty'/exp OR 'arthroscopic surgery'/exp OR 'arthrotomy'/de OR 'bursectomy'/de OR 'capsular release'/de OR 'chondroplasty'/exp OR 'leg lengthening'/de OR 'ligament surgery'/exp OR 'limb salvage'/de OR 'open reduction (procedure)'/exp OR 'osteotomy'/de OR 'femur intertrochanteric osteotomy'/de OR 'femur osteotomy'/de OR 'fibula osteotomy'/de OR 'fibulotibial osteotomy'/de OR 'pelvis osteotomy'/de OR 'tibia osteotomy'/de OR 'tibia proximal osteotomy'/de OR 'tendon surgery'/exp OR 'hip surgery'/exp OR 'joint capsulotomy'/de OR 'knee surgery'/exp OR 'shoulder surgery'/exp OR 'synovectomy'/de OR orthopedic*:ti,ab OR orthopaedic*:ti,ab OR arthroplast*:ti,ab OR hemiarthroplast*:ti,ab OR 'hemi arthroplast*':ti,ab OR arthroscop*:ti,ab OR osteotomy:ti,ab OR osteotomies:ti,ab OR osteoplasty:ti,ab OR chondroplasty:ti,ab OR osteochondroplasty:ti,ab OR tenotomy:ti,ab OR tenotomies:ti,ab OR tenodesis:ti,ab OR meniscectomy:ti,ab OR synovectomy:ti,ab OR tenosynovectomy:ti,ab OR tendoscopy:ti,ab OR arthroereisis:ti,ab OR fixat*:ti,ab OR arthrodesis:ti,ab OR salvag*:ti,ab OR amputat*:ti,ab OR acetabuloplasty:ti,ab OR (((hip OR knee OR joint OR ankle OR shoulder OR elbow OR femoral) NEAR/3 replacement*):ti,ab NOT temporomandibular:ti,ab) OR (ankle NEAR/3 fusion):ti,ab OR (release NEAR/3 'carpal tunnel'):ti,ab OR resurfacing:ti,ab OR hemipelvectomy:ti,ab OR repair*:ti,ab OR reconstruct*:ti,ab OR Latarjet:ti,ab OR Ilizarov:ti,ab OR 'open reduction':ti,ab OR microfracture:ti,ab OR arthrotomy:ti,ab OR fasciotomy:ti,ab OR nailing:ti,ab OR plating:ti,ab OR ((surgery:ti,ab OR surgical:ti,ab OR surgically:ti,ab OR operative*:ti,ab OR perioperative*:ti,ab OR 'peri operative':ti,ab OR 'peri operatively':ti,ab OR preoperative*:ti,ab OR 'pre operative':ti,ab OR 'pre operatively':ti,ab OR postoperative*:ti,ab OR 'post operative':ti,ab OR 'post operatively':ti,ab OR intraoperative*:ti,ab OR 'intra operative':ti,ab OR 'intra operatively':ti,ab) AND (fractur*:ti,ab OR injury/de OR 'avulsion injury'/exp OR 'blast injury'/de OR 'battle injury'/de OR 'crush trauma'/de OR 'limb injury'/exp OR</p>

'multiple trauma'/de OR 'musculoskeletal injury'/exp OR 'pelvis injury'/exp OR 'ligament rupture'/de OR 'tendon rupture'/de OR 'sport injury'/de OR 'traumatic amputation'/de OR 'traumatic shock'/exp OR wound/de OR (strain\*:ti,ab AND (tendon/de OR 'skeletal muscle'/exp OR muscle\*:ti,ab OR tendon\*:ti,ab)) OR tear:ti,ab OR tears:ti,ab OR tearing:ti,ab OR torn:ti,ab OR trauma:ti,ab OR traumatic:ti,ab OR (ruptur\*:ti,ab AND (tendon/de OR tendon\*:ti,ab OR 'joint ligament'/exp)) OR wound\*:ti,ab))

2 limb'/de OR 'upper limb'/exp OR 'lower limb'/exp OR 'bones of the extremities'/de OR 'bones of the arm and hand'/de OR 'arm bone'/exp OR 'carpal bone'/exp OR 'bones of the leg and foot'/de OR 'leg bone'/exp OR 'tarsal bone'/exp OR 'long bone'/exp OR 'acromioclavicular joint'/de OR 'ankle'/exp OR 'elbow'/de OR 'tarsal joint'/exp OR 'carpal joint'/de OR 'hip'/exp OR 'joint capsule'/de OR 'joint cavity'/de OR 'ankle lateral ligament'/de OR 'collateral ligament'/exp OR 'knee ligament'/exp OR 'knee'/exp OR 'knee meniscus'/de OR 'patellofemoral joint'/de OR 'radioulnar joint'/de OR 'shoulder'/exp OR 'sternoclavicular joint'/de OR 'subchondral bone'/de OR 'subtalar joint'/de OR 'wrist'/de OR 'tendon'/de OR 'achilles tendon'/de OR 'hamstring tendon'/de OR 'quadriceps tendon'/de OR 'rotator cuff'/exp OR 'limb injury'/exp OR extremity:ti,ab OR extremities:ti,ab OR limb:ti,ab OR 'long bone':ti,ab OR 'long bones':ti,ab OR leg:ti,ab OR hip:ti,ab OR pelvic:ti,ab OR acetabulum:ti,ab OR acetabular:ti,ab OR femoroacetabular:ti,ab OR labral:ti,ab OR knee:ti,ab OR femur:ti,ab OR femoral:ti,ab OR trochanter\*:ti,ab OR intertrochanter\*:ti,ab OR subtrochanter\*:ti,ab OR pertrochanter\*:ti,ab OR tibia:ti,ab OR tibial:ti,ab OR hamstring:ti,ab OR (quadriceps:ti,ab AND (tendon:ti,ab OR ruptur\*:ti,ab)) OR ('rectus femoris':ti,ab AND (tendon:ti,ab OR strain\*:ti,ab OR ruptur\*:ti,ab)) OR patella:ti,ab

OR patellar:ti,ab OR patellofemoral:ti,ab OR 'anterior cruciate':ti,ab OR ACL:ti,ab OR 'posterior cruciate':ti,ab OR menisc\*:ti,ab OR ankle:ti,ab OR Achilles:ti,ab OR subtalar:ti,ab OR hindfoot:ti,ab OR calcaneal:ti,ab OR talus:ti,ab OR talar:ti,ab OR tarsometatarsal:ti,ab OR Lisfranc:ti,ab OR malleolus:ti,ab OR malleolar:ti,ab OR foot:ti,ab OR arm:ti,ab OR forearm:ti,ab OR shoulder:ti,ab OR glenohumeral:ti,ab OR glenoid:ti,ab OR 'rotator cuff':ti,ab OR acromioclavicular:ti,ab OR subscapularis:ti,ab OR supraspinatus:ti,ab OR humerus:ti,ab OR humeral:ti,ab OR (pectoralis:ti,ab AND (tendon:ti,ab OR ruptur\*:ti,ab)) OR biceps:ti,ab OR triceps:ti,ab OR clavicle:ti,ab OR elbow:ti,ab OR elbows:ti,ab OR radius:ti,ab OR radial:ti,ab OR ulna:ti,ab OR ulnar:ti,ab OR olecranon:ti,ab OR wrist:ti,ab OR carpal:ti,ab OR Colles\*:ti,ab OR scaphoid:ti,ab OR 'total joint':ti,ab OR THA:ti,ab OR TKA:ti,ab

3 #1 AND #2

cryotherapy'/exp OR 'ice'/de OR 'thermotherapy'/exp OR 'electrostimulation'/de OR 'ambulation'/de OR 'acupuncture'/exp OR 'massage'/exp OR 'neuromuscular electrical stimulation'/de OR 'transcutaneous electrical nerve stimulation'/de OR 'nerve stimulation'/de OR 'muscle excitation'/de OR 'passive movement'/de OR cryotherapy:ti,ab OR cryotherapies:ti,ab OR 'cold therapy':ti,ab OR ice:ti,ab OR cooling:ti,ab OR warming:ti,ab OR heating:ti,ab OR ((electric OR electrical) NEAR/3 stimulat\*):ti,ab OR electrostimulation:ti,ab OR electrotherapy:ti,ab OR 'nerve stimulation':ti,ab OR 'muscle stimulation':ti,ab OR ((early OR accelerated OR immediate) NEAR/3 (ambulat\* OR walking OR mobilization OR mobilisation OR motion OR weightbearing OR 'weight bearing' OR rehabilitation)):ti,ab OR acupuncture:ti,ab OR pharmacoacupuncture:ti,ab OR acupotomy:ti,ab OR auriculotherapy:ti,ab OR "dry needling":ti,ab OR massag\*:ti,ab OR ('continuous passive' NEXT/1 (motion OR movement)):ti,ab

4

nerve block'/exp OR 'local anesthesia'/exp OR 'regional anesthesia'/exp OR 'spinal anesthesia'/exp OR 'periarticular drug administration'/exp OR 'nerve block\*':ti,ab OR 'adductor canal block\*':ti,ab OR 'ipack':ti,ab OR 'fascia iliaca compartment block\*':ti,ab OR 'fascia iliaca block\*':ti,ab OR 'plexus block\*':ti,ab OR 'neuraxial block\*':ti,ab OR 'paravertebral block\*':ti,ab OR 'regional an\$esthesia\$':ti,ab OR 'regional an\$esthesia':ti,ab OR 'local an\$esthesia':ti,ab OR 'local an\$esthetic\$':ti,ab OR 'peri-articular infiltration':ti,ab OR 'periarticular infiltration':ti,ab OR 'peri-articular injection\$':ti,ab OR 'periarticular injection\$':ti,ab OR 'interscalene block\*':ti,ab OR 'infiltration an\$esthesia':ti,ab OR 'infiltration analgesia':ti,ab OR 'infiltrative analgesia':ti,ab OR 'infiltrate analgesia':ti,ab OR 'lidocaine':ti,ab OR 'ropivacaine':ti,ab OR 'bupivacaine':ti,ab OR 'ketorolac':ti,ab OR 'tromethamine':ti,ab OR 'epinephrine':ti,ab OR 'anesthetic catheter'/exp OR ((nerve OR perineural OR epidural) NEAR/4 catheter\$):ti,ab OR 'lidocaine'/exp OR 'ropivacaine'/exp OR 'bupivacaine'/exp OR 'ketorolac'/exp OR 'trometamol'/exp OR 'epinephrine'/exp OR ((spinal OR subarachnoid OR intradural OR intrathecal OR epidural) NEAR/3 (an\$esthesia OR an\$esthetic\$ OR analges\* OR block\* OR inject\*)):ti,ab

5

corticosteroid'/exp OR corticosteroid\*:ti,ab OR corticoid\*:ti,ab OR 'adrenal cortex hormone\$':ti,ab OR prednisone:ti,ab OR methylprednisolone:ti,ab OR triamcinolone:ti,ab OR glucocorticoid\*:ti,ab OR cortisone:ti,ab OR hydrocortisone:ti,ab OR dexamethasone:ti,ab OR prednisolone:ti,ab OR betamethasone:ti,ab OR budesonide:ti,ab OR mineralocorticoid\*:ti,ab

6

7	nonsteroid antiinflammatory agent'/exp OR 'cyclooxygenase 2 inhibitor'/exp OR 'non-steroidal anti-inflammatory agent':ti,ab OR 'nonsteroidal anti-inflammatory agents':ti,ab OR meloxicam:ti,ab OR mobic:ti,ab OR naproxen:ti,ab OR aleve:ti,ab OR ibuprofen:ti,ab OR advil:ti,ab OR flurbiprofen:ti,ab OR ketorolac:ti,ab OR toradol:ti,ab OR 'cox-2 inhibitor\$:ti,ab OR 'cox2 inhibitor\$:ti,ab OR 'cyclooxygenase 2 inhibitor':ti,ab OR 'cyclo oxygenase inhibitor':ti,ab OR celecoxib:ti,ab OR celebrex:ti,ab OR diclofenac:ti,ab OR misoprostol:ti,ab OR sulindac:ti,ab OR ketoprofen:ti,ab OR tolmetin:ti,ab OR fenoprofen:ti,ab OR piroxicam:ti,ab OR etodolac:ti,ab OR indomethacin:ti,ab OR nabumetone:ti,ab OR aspirin:ti,ab OR etoricoxib:ti,ab
8	intraarticular drug administration'/exp OR 'periarticular drug administration'/exp OR inject*:ti,ab OR infiltration*:ti,ab OR 'intra articular':ti,ab OR intraarticular:ti,ab OR 'peri articular':ti,ab OR periarticular:ti,ab
9	((#6 OR #7) AND #8) OR #5
10	psychotherapy'/exp OR 'patient education'/exp OR 'Reiki'/de OR 'meditation'/exp OR psychotherapy:ti,ab OR psychotherapies:ti,ab OR psychotherapeutic:ti,ab OR ((cogniti* OR behavior* OR behaviour*) NEXT/1 (therapy OR therapies OR treatment* OR intervention*)):ti,ab OR (CBT:ti,ab NOT ('cord blood transplantation':ti,ab OR 'carotid body tumor':ti,ab OR 'cortical bone trajectory':ti,ab OR 'cortical bone thickness':ti,ab OR 'computer based training':ti,ab)) OR ('virtual reality':ti,ab AND (therapy:ti,ab OR therapies:ti,ab OR treatment*:ti,ab OR intervention*:ti,ab OR rehabilitation:ti,ab)) OR (mirror NEXT/3 (visual OR therapy OR feedback)):ti,ab OR ((sensorimotor OR 'sensori motor' OR 'sensory') NEXT/2 (feedback OR training OR rehabilitation)):ti,ab OR (music NEXT/1 (therapy OR therapies OR treatment* OR intervention*)):ti,ab OR 'guided imagery':ti,ab OR 'motor imagery':ti,ab OR Reiki:ti,ab OR hypnosis:ti,ab OR mindfulness:ti,ab OR meditat*:ti,ab OR education*:ti OR teaching:ti
11	narcotic agent'/exp OR 'narcotic analgesic agent'/exp OR narcotic*:ti,ab OR opioid*:ti,ab OR opiate*:ti,ab OR papaver*:ti,ab OR oxycodone:ti,ab OR Oxycontin:ti,ab OR 'Oxy-ER':ti,ab OR 'Oxy-CRF':ti,ab OR 'OxyIR':ti,ab OR 'Oxy-IR':ti,ab OR Percodan:ti,ab OR Percocet:ti,ab OR Roxicet:ti,ab OR hydrocodone:ti,ab OR dihydrocodeinone:ti,ab OR Vicodin:ti,ab OR Vicoprofen:ti,ab OR Norco:ti,ab OR Lortab:ti,ab OR Lorcet:ti,ab OR oxymorphone:ti,ab OR Opana:ti,ab OR morphine:ti,ab OR Kadian:ti,ab OR Avinza:ti,ab OR 'MS Contin':ti,ab OR Duramorph:ti,ab OR Roxanol:ti,ab OR codeine:ti,ab OR fentanyl:ti,ab OR Duragesic:ti,ab OR Actiq:ti,ab OR Sublimaze:ti,ab OR hydromorphone:ti,ab OR Dilaudid:ti,ab OR meperidine:ti,ab OR Demerol:ti,ab OR tramadol:ti,ab OR Ultram:ti,ab OR buprenorphine:ti,ab OR propoxyphene:ti,ab OR Darvocet:ti,ab OR Omnopon:ti,ab OR methadone:ti,ab OR Dolophine:ti,ab OR Methadose:ti,ab OR suboxone:ti,ab OR nalbuphine:ti,ab OR propoxyphene:ti,ab OR pentazocine:ti,ab

- 12 antidepressive agent'/exp OR 'serotonin noradrenalin reuptake inhibitor'/exp OR 'monoamine oxidase inhibitor'/exp OR 'serotonin uptake inhibitor'/exp OR 'dopamine uptake inhibitor'/exp OR antidepressant\$:ti,ab OR "anti depressant\$:":ti,ab OR SNRI\*:ti,ab OR (serotonin NEAR/4 inhibitor\*):ti,ab OR duloxetine:ti,ab OR desvenlafaxine:ti,ab OR levomilnacipran:ti,ab OR venlafaxine:ti,ab OR nefazodone:ti,ab OR trazodone:ti,ab OR SSRI\*:ti,ab OR citalopram:ti,ab OR escitalopram:ti,ab OR fluoxetine:ti,ab OR fluvoxamine:ti,ab OR paroxetine:ti,ab OR sertraline:ti,ab OR vilazodone:ti,ab OR (monoamine NEAR/3 inhibitor\*):ti,ab OR MAOI\$:ti,ab OR isocarboxazid:ti,ab OR phenelzine:ti,ab OR tranylcypromine:ti,ab OR NDRI\*:ti,ab OR bupropion:ti,ab OR amitriptyline:ti,ab OR clomipramine:ti,ab OR desipramine:ti,ab OR doxepin:ti,ab OR imipramine:ti,ab OR nortriptyline:ti,ab OR protriptyline:ti,ab OR trimipramine:ti,ab OR amoxapine:ti,ab OR maprotiline:ti,ab OR mirtazapine:ti,ab OR vortioxetine:ti,ab
- 13 paracetamol'/exp OR 'propacetamol'/exp OR acetaminophen:ti,ab OR paracetamol:ti,ab OR propacetamol:ti,ab OR tylenol:ti,ab
- 14 pregabalin'/exp OR 'gabapentinoid'/exp OR 'gabapentin'/exp OR pregabalin:ti,ab OR gabapentinoid\*:ti,ab OR gabapentin:ti,ab OR Lyrica:ti,ab OR Neurontin:ti,ab OR Gralise:ti,ab OR Horizant:ti,ab
- 15 ketamine'/exp OR ketamine:ti,ab OR katamine:ti,ab OR ketalar:ti,ab OR ketaject:ti,ab OR calipsol:ti,ab OR calypsol:ti,ab OR imalgene:ti,ab OR kalipsol:ti,ab OR ketanest:ti,ab OR vetalar:ti,ab OR Ketamin:ti,ab OR Ketamina:ti,ab
- 16 muscle relaxant agent'/exp OR 'suxamethonium'/exp OR 'rocuronium'/exp OR 'mivacurium'/exp OR 'pancuronium'/exp OR 'benzodiazepine derivative'/exp OR 'hydroxyzine'/exp OR 'muscle relaxant':ti,ab OR 'muscle relaxants':ti,ab OR abobotulinumtoxinA:ti,ab OR baclofen:ti,ab OR Botox:ti,ab OR carisoprodol:ti,ab OR chlorzoxazone:ti,ab OR cyclobenzaprine:ti,ab OR Dantrium:ti,ab OR dantrolene:ti,ab OR Dysport:ti,ab OR Flexeril:ti,ab OR incobotulinumtoxinA:ti,ab OR Lioresal:ti,ab OR metaxalone:ti,ab OR methocarbamol:ti,ab OR Myobloc:ti,ab OR Norflex:ti,ab OR onabotulinumtoxinA:ti,ab OR orphenadrine:ti,ab OR Parafon:ti,ab OR rimabotulinumtoxinB:ti,ab OR Robaxin:ti,ab OR Skelaxin:ti,ab OR tizanidine:ti,ab OR Xeomin:ti,ab OR atracurium:ti,ab OR cisatracurium:ti,ab OR mivacurium:ti,ab OR pancuronium:ti,ab OR rocuronium:ti,ab OR succinylcholine:ti,ab OR vecuronium:ti,ab OR Norgesic:ti,ab OR quazepam:ti,ab OR chlordiazepoxide:ti,ab OR flurazepam:ti,ab OR alprazolam:ti,ab OR diazepam:ti,ab OR oxazepam:ti,ab OR clonazepam:ti,ab OR estazolam:ti,ab OR clorazepate:ti,ab OR triazolam:ti,ab OR lorazepam:ti,ab OR temazepam:ti,ab OR clobazam:ti,ab OR midazolam:ti,ab OR Doral:ti,ab OR Valium:ti,ab OR Versed:ti,ab OR hydroxyzine:ti,ab
- 17 [1990-3000]/py AND [english]/lim
- 18 [2000-3000]/py AND [english]/lim
- 19 [2005-3000]/py AND [english]/lim
- 20 [2010-3000]/py AND [english]/lim
- 21 randomized controlled trial'/exp OR 'randomized controlled trial (topic)'/exp OR 'randomization'/de OR random\*:ti,ab,kw
- 22 systematic review'/exp OR 'meta analysis'/exp OR ((systematic\* NEAR/2 review\*):ti,ab,kw) OR 'meta analys\*':ti,ab,kw

23	#21 or #22
24	abstract report'/de OR abstracts:ti OR 'book'/de OR 'editorial'/de OR 'editorial':it OR editorial:ti OR 'note'/de OR 'note':it OR 'letter'/de OR 'letter':it OR letter:ti OR reply:ti OR commentary:ti OR 'case study'/de OR 'case report'/de OR 'chapter':it OR 'conference paper'/exp OR 'conference paper':it OR 'conference abstract':it OR 'conference review':it OR 'cadaver'/de OR 'in vitro study'/exp OR cadaver*:ti,ab OR 'in vitro':ti,ab OR 'animal experiment'/exp OR animal\$:ti OR dog:ti OR dogs:ti OR canine:ti OR horse\$:ti OR equine:ti OR mouse:ti OR mice:ti OR rat:ti OR rats:ti OR rabbit:ti OR rabbits:ti OR sheep:ti OR porcine:ti OR pig:ti OR pigs:ti OR rodent\$:ti OR monkey\$:ti
25	('Juvenile'/exp OR p\$ediatric*:ti OR child:ti OR children:ti) NOT ('adult'/exp OR 'adult*':ti)
26	#24 OR #25
27	((#4 OR #10) AND #3) AND #17
28	(#9 AND #3) AND #18
29	((#12 OR #14 OR #15 OR #16) AND #3) AND #19
30	((#7 OR #11 OR #13) AND #3) AND #20
31	((#27 OR #28 OR #29 OR #30) AND #23) NOT #26

**Database:** Cochrane Central Register of Controlled Trials (CENTRAL)

**Interface:** Wiley (<https://www.cochranelibrary.com/central>)

**Date Last Searched:** June 2, 2020

**LINE SEARCH QUERY**

1	(orthopedic* OR orthopaedic* OR arthroplast* OR hemiarthroplast* OR arthroscop* OR osteotomy OR osteotomies OR osteoplasty OR chondroplasty OR osteochondroplasty OR tenotomy OR tenotomies OR tenodesis OR meniscectomy OR synovectomy OR tenosynovectomy OR tendoscopy OR arthroereisis OR fixat* OR arthrodesis OR salvag* OR amputat* OR acetabuloplasty OR (((hip OR knee OR joint OR ankle OR shoulder OR elbow OR femoral) NEAR/3 replacement*) NOT temporomandibular) OR (ankle NEAR/3 fusion) OR (release NEAR/3 "carpal tunnel") OR resurfacing OR hemipelvectomy OR repair* OR reconstruct* OR Latarjet OR Ilizarov OR "open reduction" OR microfracture OR arthrotomy OR fasciotomy OR nailing OR plating OR ((surgery OR surgical OR surgically OR operative* OR perioperative* OR "peri operative" OR "peri operatively" OR preoperative* OR "pre operative" OR "pre operatively" OR postoperative* OR "post operative" OR "post operatively" OR intraoperative* OR "intra operative" OR "intra operatively") AND (fractur* OR avuls* OR injur* OR (strain* AND (muscle* OR tendon*)) OR tear OR tears OR tearing OR torn OR trauma OR traumatic OR (ruptur* AND (tendon* OR ligament OR ligaments)) OR wound*)))ti,ab
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2	<p>(extremity OR extremities OR limb OR "long bone" OR "long bones" OR leg OR hip OR pelvic OR acetabulum OR acetabular OR femoroacetabular OR labral OR knee OR femur OR femoral OR trochanter* OR intertrochanter* OR subtrochanter* OR pertrochanter* OR tibia OR tibial OR hamstring OR (quadriceps AND (tendon OR ruptur*)) OR ("rectus femoris" AND (tendon OR strain* OR ruptur*)) OR patella OR patellar OR patellofemoral OR "anterior cruciate" OR ACL OR "posterior cruciate" OR menisc* OR ankle OR Achilles OR subtalar OR hindfoot OR calcaneal OR talus OR talar OR tarsometatarsal OR Lisfranc OR malleolus OR malleolar OR foot OR arm OR forearm OR shoulder OR glenohumeral OR glenoid OR "rotator cuff" OR acromioclavicular OR subscapularis OR supraspinatus OR humerus OR humeral OR (pectoralis AND (tendon OR ruptur*)) OR biceps OR triceps OR clavicle OR elbow OR elbows OR radius OR radial OR ulna OR ulnar OR olecranon OR wrist OR carpal OR scaphoid OR "total joint" OR THA OR TKA):ti,ab</p>
3	<p>#1 AND #2</p>
4	<p>cryotherapy:ti,ab OR cryotherapies:ti,ab OR "cold therapy":ti,ab OR ice:ti,ab OR cooling:ti,ab OR warming:ti,ab OR heating:ti,ab OR ((electric OR electrical) NEAR/3 stimulat*):ti,ab OR electrostimulation:ti,ab OR electrotherapy:ti,ab OR "nerve stimulation":ti,ab OR "muscle stimulation":ti,ab OR ((early OR accelerated OR immediate) NEAR/4 (ambulat* OR walking OR mobilization OR mobilisation OR motion OR weightbearing OR "weight bearing" OR rehabilitation)):ti,ab OR acupuncture:ti,ab OR pharmacopuncture:ti,ab OR acupotomy:ti,ab OR auriculotherapy:ti,ab OR "dry needling":ti,ab OR massag*:ti,ab OR ("continuous passive" NEXT/1 (motion OR movement)):ti,ab</p>
5	<p>((nerve NEXT/1 block*) OR IPACK OR (plexus NEXT/1 block*) OR (neuraxial NEXT/1 block*) OR ("adductor canal" NEXT/1 block*) OR ("fascia iliaca compartment" NEXT/1 block*) OR ("fascia iliaca" NEXT/1 block*) OR (paravertebral NEXT/1 block*) OR "regional anesthesia" OR "regional anesthetic" OR "regional anaesthesia" OR "regional anaesthetic" OR "local anesthesia" OR "local anaesthesia" OR "local anesthetic" OR "local anaesthetic" OR "local anesthetics" OR (articular NEXT/2 (infiltration OR injection OR injections)) OR "periarticular infiltration" OR "periarticular injection" OR "periarticular injections" OR (interscalene NEXT/1 block*) OR "infiltration anesthesia" OR "infiltration analgesia" OR "lidocaine" OR "ropivacaine" OR "bupivacaine" OR "ketorolac" OR "tromethamine" OR "epinephrine" OR ((nerve OR perineural OR epidural) NEAR/4 catheter*)):ti,ab OR ((spinal OR subarachnoid OR intradural OR intrathecal OR epidural) NEAR/3 (an?esthesia OR an?esthetic? OR analges* OR block* OR inject*)):ti,ab</p>
6	<p>("adrenal cortex hormones" or corticosteroid* or corticoid* or prednisone or methylprednisolone or triamcinolone or dexamethasone or glucocorticoid* or cortisone or hydrocortisone or prednisolone or betamethasone or budesonide or mineralocorticoid*):ti,ab</p>
7	<p>("non-steroidal anti-inflammatory agents" OR "nonsteroidal anti-inflammatory agents" OR meloxicam OR Mobic OR naproxen OR Aleve OR ibuprofen OR Advil OR flurbiprofen OR ketorolac OR Toradol OR "COX-2 inhibitor" OR "COX-2 inhibitors" OR "COX2 inhibitor" OR "COX2 inhibitors" OR "cyclooxygenase 2 inhibitor" OR "cyclo oxygenase inhibitor" OR celecoxib OR Celebrex OR diclofenac OR misoprostol OR sulindac OR ketoprofen OR tolmetin OR etodolac OR fenoprofen OR piroxicam OR indomethacin OR nabumetone OR aspirin OR etoricoxib):ti,ab</p>

8 (inject\* OR infiltration\* OR "intra articular" OR intraarticular OR "peri articular" OR periarticular):ti,ab

9 ((#6 OR #7) AND #8) OR #5

10 psychotherapy:ti,ab OR psychotherapies:ti,ab OR psychotherapeutic:ti,ab OR ((cogniti\*:ti,ab OR behavior\*:ti,ab OR behaviour\*:ti,ab) AND (therapy:ti,ab OR therapies:ti,ab OR treatment\*:ti,ab OR intervention\*:ti,ab)) OR (CBT:ti,ab NOT ("cord blood transplantation":ti,ab OR "carotid body tumor":ti,ab OR "cortical bone trajectory":ti,ab OR "cortical bone thickness":ti,ab OR "computer based training":ti,ab)) OR ("virtual reality":ti,ab AND (therapy:ti,ab OR therapies:ti,ab OR treatment\*:ti,ab OR intervention\*:ti,ab OR rehabilitation:ti,ab)) OR "mirror therapy":ti,ab OR "visual feedback":ti,ab OR "mirror feedback":ti,ab OR ((sensorimotor:ti,ab OR "sensori motor":ti,ab OR "sensory":ti,ab) AND (feedback:ti,ab OR training:ti,ab OR rehabilitation:ti,ab)) OR (music:ti,ab AND (therapy:ti,ab OR therapies:ti,ab OR treatment\*:ti,ab OR intervention\*:ti,ab)) OR "guided imagery":ti,ab OR "motor imagery":ti,ab OR Reiki:ti,ab OR hypnosis:ti,ab OR mindfulness:ti,ab OR meditat\*:ti,ab OR education\*:ti OR teaching:ti

11 (narcotic\* OR opioid\* OR opiate\* OR papaver\* OR oxycodone OR Oxycontin OR "Oxy-ER" OR "Oxy-CRF" OR "OxylR" OR "Oxy-IR" OR Percodan OR Percocet OR Roxicet OR hydrocodone OR dihydrocodeinone OR Vicodin OR Vicoprofen OR Norco OR Lortab OR Lorcet OR oxymorphone OR Opana OR morphine OR Kadian OR Avinza OR "MS Contin" OR Duramorph OR Roxanol OR codeine OR fentanyl OR Duragesic OR Actiq OR Sublimaze OR hydromorphone OR Dilaudid OR meperidine OR Demerol OR tramadol OR Ultram OR buprenorphine OR propoxyphene OR Darvocet OR Omnopon OR methadone OR Dolophine OR Methadose OR suboxone OR nalbuphine OR propoxyphene OR pentazocine):ti,ab

12 (antidepressant OR antidepressants OR "anti depressant" OR "anti depressants" OR SNRI\* OR (serotonin NEAR/4 inhibitor\*) OR duloxetine OR desvenlafaxine OR levomilnacipran OR venlafaxine OR nefazodone OR trazodone OR SSRI\* OR citalopram OR escitalopram OR fluoxetine OR fluvoxamine OR paroxetine OR sertraline OR vilazodone OR (monoamine NEAR/3 inhibitor\*) OR MAOI OR MAOIs OR isocarboxazid OR phenelzine OR tranylcypromine OR NDRI\* OR bupropion OR amitriptyline OR clomipramine OR desipramine OR doxepin OR imipramine OR nortriptyline OR protriptyline OR trimipramine OR amoxapine OR maprotiline OR mirtazapine OR vortioxetine):ti,ab

13 acetaminophen:ti,ab OR paracetamol:ti,ab OR propacetamol:ti,ab OR tylenol:ti,ab

14 (pregabalin OR gabapentinoid\* OR gabapentin OR Lyrica OR Neurontin OR Gralise OR Horizant):ti,ab

15 (ketamine OR katamine OR ketalar OR ketaject OR calipsol OR calypsol OR imalgene OR kalipsol OR ketanest OR vetalar OR Ketamin OR Ketamina):ti,ab

16 ("muscle relaxant" OR "muscle relaxants" OR abobotulinumtoxinA OR baclofen OR Botox OR carisoprodol OR chlorzoxazone OR cyclobenzaprine OR Dantrium OR dantrolene OR Dysport OR Flexeril OR incobotulinumtoxinA OR Lioresal OR metaxalone OR methocarbamol OR Myobloc OR Norflex OR onabotulinumtoxinA OR orphenadrine OR Parafon OR rimabotulinumtoxinB OR Robaxin OR Skelaxin OR tizanidine OR Xeomin OR atracurium OR cisatracurium OR mivacurium OR pancuronium OR rocuronium OR succinylcholine OR vecuronium OR Norgesic OR quazepam OR chlordiazepoxide OR flurazepam OR alprazolam

OR diazepam OR oxazepam OR clonazepam OR estazolam OR clorazepate OR triazolam OR lorazepam OR temazepam OR clobazam OR midazolam OR Doral OR Valium OR Versed OR hydroxyzine):ti,ab

- |    |   |
|----|---|
| 17 | "conference abstract":pt OR abstracts:ti OR editorial:ti OR reply:ti OR commentary:ti OR letter:ti OR cadaver*:ti,ab 'in vitro':ti,ab OR animal*:ti OR dog:ti OR dogs:ti OR canine:ti OR horse:ti OR horses:ti OR equine:ti OR mouse:ti OR mice:ti OR rat:ti OR rats:ti OR rabbit:ti OR rabbits:ti OR sheep:ti OR porcine:ti OR pig:ti OR pigs:ti OR rodent?:ti OR monkey?:ti |
| 18 | ([mh Infant] OR [mh Child] OR (pediatric* OR paediatric* OR child OR children):ti) NOT ([mh Adult] OR [mh Adolescent] OR adult*:ti)   |
| 19 | #17 OR #18  |
| 20 | ((#4 OR #10) AND #3) NOT #19 <i>with Publication Year from 1990 to 2020, in Trials</i>  |
| 21 | (#9 AND #3) NOT #19 <i>with Publication Year from 2000 to 2020, in Trials</i>   |
| 22 | ((#12 OR #14 OR #15 OR #16) AND #3) NOT #19 <i>with Publication Year from 2005 to 2020, in Trials</i>   |
| 23 | ((#7 OR #11 OR #13) AND #3) NOT #19 <i>with Publication Year from 2010 to 2020, in Trials</i>   |
| 24 | #20 OR #21 OR #22 OR #23  |

## **Excluded Articles**

<b>Authors</b>	<b>Article Title</b>	<b>Year</b>	<b>Reason for Exclusion</b>
Molt, M.; Toksvig-Larsen, S.	2-year follow-up report on micromotion of a short tibia stem. A prospective, randomized RSA study of 59 patients	2015	irrelevant topic; implant comparison
Bost, J. E.; Williams, B. A.; Bottegal, M. T.; Dang, Q.; Rubio, D. M.	The 8-item Short-Form Health Survey and the physical comfort composite score of the quality of recovery 40-item scale provide the most responsive assessments of pain, physical function, and mental function during the first 4 days after ambulatory knee surgery with regional anesthesia	2007	irrelevant comparison; regional anesthesia vs control
Goyal, N.; McKenzie, J.; Sharkey, P. F.; Parvizi, J.; Hozack, W. J.; Austin, M. S.	The 2012 Chitranjan Ranawat award: intraarticular analgesia after TKA reduces pain: a randomized, double-blinded, placebo-controlled, prospective study	2013	irrelevant comparison; Intra-articular vs placebo
Jain, R. K.; Porat, M. D.; Klingenstein, G. G.; Reid, J. J.; Post, R. E.; Schoifet, S. D.	The AAHKS Clinical Research Award: Liposomal Bupivacaine and Periarticular Injection Are Not Superior to Single-Shot Intra-articular Injection for Pain Control in Total Knee Arthroplasty	2016	irrelevant comparison; local vs local
Benedetti, M. G.; Cavazzuti, L.; Amabile, M.; Tassinari, E.; Valente, G.; Zanotti, G.; Vaienti, E.; Orsini, S.; Mariani, E.; Taddei, F.	Abductor muscle strengthening in THA patients operated with minimally invasive anterolateral approach for developmental hip dysplasia	2019	irrelevant comparison; strengthening intervention vs control
Yeh, C. C.; Ho, S. T.; Kong, S. S.; Wu, C. T.; Wong, C. S.	Absence of the preemptive analgesic effect of dextromethorphan in total knee replacement under epidural anesthesia	2000	irrelevant comparison; IM vs IM
Larsen, K.; Sorensen, O. G.; Hansen, T. B.; Thomsen, P. B.; Soballe, K.	Accelerated perioperative care and rehabilitation intervention for hip and knee replacement is effective: a randomized clinical trial involving 87 patients with 3 months of follow-up	2008	irrelevant topic; multi modal PT
Cameron, I. D.; Lyle, D. M.; Quine, S.	Accelerated rehabilitation after proximal femoral fracture: a randomized controlled trial	1993	irrelevant topic; multimodal PT
Brehmer, J. L.; Husband, J. B.	Accelerated rehabilitation compared with a standard protocol after distal radial fractures treated with volar open reduction and internal fixation: a prospective, randomized, controlled study	2014	irrelevant topic; multi modal PT

Brumann, M.; Baumbach, S. F.; Mutschler, W.; Polzer, H.	Accelerated rehabilitation following Achilles tendon repair after acute rupture - Development of an evidence-based treatment protocol	2014	references reviewed
Janssen, R. P. A.; van Melick, N.; van Mourik, J. B. A.; Reijman, M.; van Rhijn, L. W.	ACL reconstruction with hamstring tendon autograft and accelerated brace-free rehabilitation: a systematic review of clinical outcomes	2018	references reviewed
Clarke, H.; Kay, J.; Mitsakakis, N.; Katz, J.	Acute pain after total hip arthroplasty does not predict the development of chronic postsurgical pain 6 months later	2010	Irrelevant comparison; chronic pain vs no chronic pain; factors predicting chronic pain
Casati, A.; Vinciguerra, F.; Cappelleri, G.; Aldegheri, G.; Fanelli, G.; Putzu, M.; Chelly, J. E.	Adding clonidine to the induction bolus and postoperative infusion during continuous femoral nerve block delays recovery of motor function after total knee arthroplasty	2005	irrelevant comparison; block vs block vs block
Li, J.; Wang, H.; Dong, B.; Ma, J.; Wu, X.	Adding dexmedetomidine to ropivacaine for femoral nerve block inhibits local inflammatory response	2017	irrelevant comparison; block vs block
Demiraran, Y.; Yucel, I.; Akcali, G. E.; Degirmenci, E.; Sezen, G.; Iskender, A.	Adding intrathecal morphine to unilateral spinal anesthesia results in better pain relief following knee arthroscopy	2008	Irrelevant comparison; opioid vs control
Goytizolo, E. A.; Lin, Y.; Kim, D. H.; Ranawat, A. S.; Westrich, G. H.; Mayman, D. J.; Su, E. P.; Padgett, D. E.; Alexiades, M. M.; Soeters, R.; Mac, P. D.; Fields, K. G.; YaDeau, J. T.	Addition of Adductor Canal Block to Periarticular Injection for Total Knee Replacement: A Randomized Trial	2019	irrelevant comparison; block vs control
Krishnan, S. H.; Gilbert, L. A.; Ghoddoussi, F.; Applefield, D. J.; Kassab, S. S.; Ellis, T. A., 2nd	Addition of buprenorphine to local anesthetic in adductor canal blocks after total knee arthroplasty improves postoperative pain relief: a randomized controlled trial	2016	irrelevant comparison: opioid vs placebo
YaDeau, J. T.; Paroli, L.; Fields, K. G.; Kahn, R. L.; LaSala, V. R.; Jules-Elysee, K. M.; Kim, D. H.; Haskins, S. C.; Hedden, J.; Goon, A.; Roberts, M. M.; Levine, D. S.	Addition of Dexamethasone and Buprenorphine to Bupivacaine Sciatic Nerve Block: A Randomized Controlled Trial	2015	irrelevant comparison: corticosteroids vs opioids
Kol, I. O.; Ozturk, H.; Kaygusuz, K.; Gursoy, S.; Comert, B.; Mimaroglu, C.	Addition of dexmedetomidine or lornoxicam to prilocaine in intravenous regional anaesthesia for hand or forearm surgery: a randomized controlled study	2009	irrelevant comparison: dexmedetomidine vs NSAID
Patterson, L.; Avery, N.; Chan, P.; Parlow, J. L.	The addition of fentanyl does not alter the extent of spread of intrathecal isobaric bupivacaine in clinical practice	2001	< 30 per target group

Nazareth, M.; Ghoshal, P.; Namshikar, V.; Gaude, Y.	Addition of intrathecal fentanyl to bupivacaine clonidine mixture effect on quality of subarachnoid block and postoperative analgesia	2013	irrelevant comparison; block vs block
Jacobsen, J.; Husum, B.; von Staffeldt, H.; Qvist, T. F.; Jensen, P. E.; Kledal, S.	The addition of lidocaine to bupivacaine does not shorten the duration of spinal anesthesia: a randomized, double-blinded study of patients undergoing knee arthroscopy	2011	irrelevant comparison: spinal vs spinal
Yadeau, J. T.; Paroli, L.; Kahn, R. L.; Jules-Elysee, K. M.; Lasala, V. R.; Liu, S. S.; Lin, E.; Powell, K.; Buschiazzo, V. L.; Wukovits, B.; Roberts, M. M.; Levine, D. S.	Addition of pregabalin to multimodal analgesic therapy following ankle surgery: a randomized double-blind, placebo-controlled trial	2012	<30 pts per group
Aso, K.; Izumi, M.; Sugimura, N.; Okanoue, Y.; Kamimoto, Y.; Yokoyama, M.; Ikeuchi, M.	Additional benefit of local infiltration of analgesia to femoral nerve block in total knee arthroplasty: double-blind randomized control study	2019	irrelevant comparison: local infiltration vs. control
Sardana, V.; Burzynski, J. M.; Scuderi, G. R.	Adductor Canal Block or Local Infiltrate Analgesia for Pain Control After Total Knee Arthroplasty? A Systematic Review and Meta-Analysis of Randomized Controlled Trials	2019	references reviewed
Joe, H. B.; Choo, H. S.; Yoon, J. S.; Oh, S. E.; Cho, J. H.; Park, Y. U.	Adductor canal block versus femoral nerve block combined with sciatic nerve block as an anesthetic technique for hindfoot and ankle surgery: A prospective, randomized noninferiority trial	2016	irrelevant comparison; block vs block
Lee, H. J.; Kim, Y. S.; Park, I.; Ha, D. H.; Lee, J. H.	Administration of analgesics after rotator cuff repair: a prospective clinical trial comparing glenohumeral, subacromial, and a combination of glenohumeral and subacromial injections	2015	irrelevant comparison; between 2 different local sites
Larsen, K. A.; Kelly, S. E.; Stern, T. A.; Bode, R. H., Jr.; Price, L. L.; Hunter, D. J.; Gulczynski, D.; Bierbaum, B. E.; Sweeney, G. A.; Hoikala, K. A.; Cotter, J. J.; Potter, A. W.	Administration of olanzapine to prevent postoperative delirium in elderly joint-replacement patients: a randomized, controlled trial	2010	Irrelevant comparison; olanzapine (atypical antipsychotic) vs placebo
Lemoel, F.; Contenti, J.; Giolito, D.; Boiffier, M.; Rapp, J.; Istria, J.; Fournier, M.; Ageron, F. X.; Levraut, J.	Adverse Events With Ketamine Versus Ketofol for Procedural Sedation on Adults: A Double-blind, Randomized Controlled Trial	2017	irrelevant comparison; propofol vs control
Schepers, T.; Van Lieshout, E. M.; Van der Linden, H. J.; De Jong, V. M.; Goslings, J. C.	Aftercare following syndesmotic screw placement: a systematic review	2013	References Reviewed

Winkler, M.; Akca, O.; Birkenberg, B.; Hetz, H.; Scheck, T.; Arkilic, C. F.; Kabon, B.; Marker, E.; Grubl, A.; Czepan, R.; Greher, M.; Goll, V.; Gottsauner-Wolf, F.; Kurz, A.; Sessler, D. I.	Aggressive warming reduces blood loss during hip arthroplasty	2000	irrelevant topic; core temperature warming
Stenman, P.; Salonen, M.; Tarkkila, P.; Rosenberg, P.	Analgesia and side effects of the addition of 10 or 20 microg fentanyl to articaïne in spinal anesthesia for knee arthroscopy: a randomized and observer-blinded study	2017	Irrelevant comparison; opioid (different doses) vs control
Yun, M. J.; Kim, Y. H.; Han, M. K.; Kim, J. H.; Hwang, J. W.; Do, S. H.	Analgesia before a spinal block for femoral neck fracture: fascia iliaca compartment block	2009	< 60 total pts
Mei, S.; Jin, S.; Chen, Z.; Ding, X.; Zhao, X.; Li, Q.	Analgesia for total knee arthroplasty: a meta-analysis comparing local infiltration and femoral nerve block	2015	references reviewed
Runge, C.; Jensen, J. M.; Clemmesen, L.; Knudsen, H. B.; Holm, C.; Borglum, J.; Bendtsen, T. F.	Analgesia of Combined Femoral Triangle and Obturator Nerve Blockade Is Superior to Local Infiltration Analgesia After Total Knee Arthroplasty With High-Dose Intravenous Dexamethasone	2018	confounded treatment; blocks + NSAID vs LAI and no NSAID
Baker, J. F.; McGuire, C. M.; Byrne, D. P.; Hunter, K.; Eustace, N.; Mulhall, K. J.	Analgesic control after hip arthroscopy: a randomised, double-blinded trial comparing portal with intra-articular infiltration of bupivacaine	2011	irrelevant comparison; local vs local
Calmet, J.; Esteve, C.; Boada, S.; Gine, J.	Analgesic effect of intra-articular ketorolac in knee arthroscopy: comparison of morphine and bupivacaine	2004	< 30 per target group
Lunn, T. H.; Frokjaer, V. G.; Hansen, T. B.; Kristensen, P. W.; Lind, T.; Kehlet, H.	Analgesic effect of perioperative escitalopram in high pain catastrophizing patients after total knee arthroplasty: a randomized, double-blind, placebo-controlled trial	2015	work group exclusion;
Emery, P.; Koncz, T.; Pan, S.; Lowry, S.	Analgesic effectiveness of celecoxib and diclofenac in patients with osteoarthritis of the hip requiring joint replacement surgery: a 12-week, multicenter, randomized, double-blind, parallel-group, double-dummy, noninferiority study	2008	published before 2010
Kizilkaya, M.; Yildirim, O. S.; Dogan, N.; Kursad, H.; Okur, A.	Analgesic effects of intraarticular sufentanil and sufentanil plus methylprednisolone after arthroscopic knee surgery	2004	Publication before 2010
Krone, S. C.; Chan, V. W.; Regan, J.; Peng, P.; Poate, E. M.; McCartney, C.; Miniaci, A.	Analgesic effects of low-dose ropivacaine for interscalene brachial plexus block for outpatient shoulder surgery-a dose-finding study	2001	irrelevant comparison: different doses

Oral, E. G.; Hanci, A.; Ulufer Sivrikaya, G.; Dobrucali, H.; Turkoglu Kilinc, L.	The Analgesic Effects of Morphine and Tramadol Added to Intra-articular Levobupivacaine-Tenoxicam Combination for Arthroscopic Knee Surgery on Postoperative Pain; a Randomized Clinical Trial	2015	work group exclusion; intervention not used in US
Xu, B.; Wang, Y.; Zeng, C.; Wei, J.; Li, J.; Wu, Z.; He, H.; Lei, G.; Xie, D.; Ding, X.	Analgesic efficacy and safety of ketamine after total knee or hip arthroplasty: a meta-analysis of randomised placebo-controlled studies	2019	references reviewed
Joppich, R.; Richards, P.; Kelen, R.; Stern, W.; Zarghooni, K.; Otto, C.; Bohmer, A.; Petzke, F.; Treptau, T.; Lefering, R.; Bathis, H.; Neugebauer, E.	Analgesic efficacy and tolerability of intravenous morphine versus combined intravenous morphine and oxycodone in a 2-center, randomized, double-blind, pilot trial of patients with moderate to severe pain after total hip replacement	2012	< 60 total pts
Szucs, S.; Iohom, G.; O'Donnell, B.; Sajgalik, P.; Ahmad, I.; Salah, N.; Shorten, G.	Analgesic efficacy of continuous femoral nerve block commenced prior to operative fixation of fractured neck of femur	2012	< 60 total pts
Albrecht, E.; Guyen, O.; Jacot-Guillarmod, A.; Kirkham, K. R.	The analgesic efficacy of local infiltration analgesia vs femoral nerve block after total knee arthroplasty: a systematic review and meta-analysis	2016	references reviewed
Kirkham, K. R.; Grape, S.; Martin, R.; Albrecht, E.	Analgesic efficacy of local infiltration analgesia vs. femoral nerve block after anterior cruciate ligament reconstruction: a systematic review and meta-analysis	2017	references reviewed
Hynes, D.; McCarroll, M.; Hiesse-Provost, O.	Analgesic efficacy of parenteral paracetamol (propacetamol) and diclofenac in post-operative orthopaedic pain	2006	work group exclusion; not route of interest, intervention not in US
Ekman, E. F.; Wahba, M.; Ancona, F.	Analgesic efficacy of perioperative celecoxib in ambulatory arthroscopic knee surgery: a double-blind, placebo-controlled study	2006	published before 2010
Kim, M. K.; Moon, H. Y.; Ryu, C. G.; Kang, H.; Lee, H. J.; Shin, H. Y.	The analgesic efficacy of the continuous adductor canal block compared to continuous intravenous fentanyl infusion with a single-shot adductor canal block in total knee arthroplasty: a randomized controlled trial	2019	< 60 total pts
Gupta, B.; Banerjee, S.; Prasad, A.; Farooque, K.; Sharma, V.; Trikha, V.	Analgesic efficacy of three different dosages of intra-articular morphine in arthroscopic knee surgeries: Randomised double-blind trial	2015	Irrelevant comparison; different opioid doses
Martinez, V.; Cymerman, A.; Ben Ammar, S.; Fiaud, J. F.; Rapon, C.; Poindessous, F.; Judet, T.; Chauvin, M.; Bouhassira, D.; Sessler, D.; Mazoit, X.; Fletcher, D.	The analgesic efficiency of combined pregabalin and ketamine for total hip arthroplasty: a randomised, double-blind, controlled study	2014	irrelevant combination; pregabalin and ketamine



Martin, F.; Martinez, V.; Mazoit, J. X.; Bouhassira, D.; Cherif, K.; Gentili, M. E.; Piriou, P.; Chauvin, M.; Fletcher, D.	Antiinflammatory effect of peripheral nerve blocks after knee surgery: clinical and biologic evaluation	2008	< 60 total pts
Beswick, A. D.; Dennis, J.; Gooberman-Hill, R.; Blom, A. W.; Wylde, V.	Are perioperative interventions effective in preventing chronic pain after primary total knee replacement? A systematic review	2019	references reviewed
Yan, L. J.; Zhang, F. R.; Ma, C. S.; Zheng, Y.; Chen, J. T.; Li, W.	Arteriovenous Graft for Hemodialysis: Effect of Cryotherapy on Postoperative Pain and Edema	2019	Irrelevant topic; AV graft surgery, non-orthopedic
Mardani-Kivi, M.; Karimi Mobarakeh, M.; Keyhani, S.; Haghighi, M.; Hashemi-Motlagh, K.; Saheb-Ekhtiari, K.	Arthroscopic bankart surgery: Does gabapentin reduce postoperative pain and opioid consumption? A triple-blinded randomized clinical trial	2016	work group exclusion; unclear
An, V. V.; Phan, K.; Levy, Y. D.; Bruce, W. J.	Aspirin as Thromboprophylaxis in Hip and Knee Arthroplasty: A Systematic Review and Meta-Analysis	2016	references reviewed
Jiang, Y.; Du, H.; Liu, J.; Zhou, Y.	Aspirin combined with mechanical measures to prevent venous thromboembolism after total knee arthroplasty: a randomized controlled trial	2014	irrelevant comparison: NSAID vs heparin
Haykal, T.; Kheiri, B.; Zayed, Y.; Barbarawi, M.; Miran, M. S.; Chahine, A.; Katato, K.; Bachuwa, G.	Aspirin for venous thromboembolism prophylaxis after hip or knee arthroplasty: An updated meta-analysis of randomized controlled trials	2019	References Reviewed
Sahebally, S. M.; Healy, D.; Walsh, S. R.	Aspirin in the primary prophylaxis of venous thromboembolism in surgical patients	2015	References Reviewed
Usichenko, T. I.; Dinse, M.; Lysenyuk, V. P.; Wendt, M.; Pavlovic, D.; Lehmann, C.	Auricular acupuncture reduces intraoperative fentanyl requirement during hip arthroplasty--a randomized double-blinded study	2006	<30 pts per group
Johnson, D. P.; Eastwood, D. M.	Beneficial effects of continuous passive motion after total condylar knee arthroplasty	1992	<60 total pts
Protic, A.; Horvat, M.; Komen-Usljebrka, H.; Frkovic, V.; Zuvic-Butorac, M.; Bukal, K.; Sustic, A.	Benefit of the minimal invasive ultrasound-guided single shot femoropopliteal block for ankle surgery in comparison with spinal anesthesia	2010	< 20 per injection group
Huang, G. S.; Wang, C. C.; Hu, M. H.; Cherng, C. H.; Lee, M. S.; Tsai, C.	Bilateral passive leg raising attenuates and delays tourniquet deflation-induced hypotension and tachycardia under spinal anaesthesia: a randomised controlled trial	2014	Irrelevant comparison; passive leg raising vs control, irrelevant outcomes; BP and heart rate

S.; Chan, W. H.; Hsieh, X. X.; Lin, L. C.			
Hassani, V.; Movassaghi, G.; Safaian, R.; Safari, S.; Zamani, M. M.; Hajiashrafi, M.; Sedaghat, M.	Bupivacaine-sufentanil versus bupivacaine-fentanyl in spinal anesthesia of patients undergoing lower extremity surgery	2014	work group exclusion; not route of interest
Candido, K. D.; Hennes, J.; Gonzalez, S.; Mikat-Stevens, M.; Pinzur, M.; Vasic, V.; Knezevic, N. N.	Buprenorphine enhances and prolongs the postoperative analgesic effect of bupivacaine in patients receiving infragluteal sciatic nerve block	2010	irrelevant comparison; buprenorphine vs. control
YaDeau, J. T.; Gordon, M. A.; Goytizolo, E. A.; Lin, Y.; Fields, K. G.; Goon, A. K.; Holck, G.; Miu, T. W.; Gulotta, L. V.; Dines, D. M.; Craig, E. V.	Buprenorphine, Clonidine, Dexamethasone, and Ropivacaine for Interscalene Nerve Blockade: A Prospective, Randomized, Blinded, Ropivacaine Dose-Response Study	2016	irrelevant comparison; block vs block
Jacobson, E.; Forssblad, M.; Rosenberg, J.; Westman, L.; Weidenhielm, L.	Can local anesthesia be recommended for routine use in elective knee arthroscopy? A comparison between local, spinal, and general anesthesia	2000	work group exclusion; irrelevant topic
Barastegui, D.; Robert, I.; Palau, E.; Haddad, S.; Reverte-Vinaixa, M.; Lorente, L.; Cots, M.	Can local infiltration analgesia increase satisfaction in postoperative short-term pain control in total knee arthroplasty?	2017	irrelevant comparison; local vs control
Kim, Y. M.; Joo, Y. B.; Kang, C.; Song, J. H.	Can ultrasound-guided nerve block be a useful method of anesthesia for arthroscopic knee surgery?	2015	irrelevant comparison; block vs block vs block
Gan, T. J.; Singla, N.; Daniels, S. E.; Lacouture, P. G.; Min, L. H.; Reyes, C. R.; Carr, D. B.	Cardiovascular safety of hydroxypropyl-beta-cyclodextrin-diclofenac in the management of acute postsurgical pain: a pooled analysis of 2 randomized, double-blind, placebo- and active comparator-controlled phase III clinical trials	2016	mixed population; 54% abdominal/pelvic surgery
Yin, C.; Zhang, J.; Er, Z.	Clinical application of auricular point sticking in perioperative hemostasis for elderly patients with intertrochanteric fractures of the femur	2019	non-RCT
Yue, Y.; Tao, L.; Fang, J.; Xie, Q.; He, S.; Huang, C.; Yang, X.	Clinical curative effect of fuzi-cake-separated moxibustion for preventing dysuria after operation for lower limb fracture	2014	irrelevant topic; moxibustion
Li, S.; Sun, H.; Luo, X.; Wang, K.; Wu, G.; Zhou, J.; Wang, P.; Sun, X.	The clinical effect of rehabilitation following arthroscopic rotator cuff repair: A meta-analysis of early versus delayed passive motion	2018	references reviewed

Cai, G.; Li, Y.; I. Han R; Wang, F.; Wang, G.; He, C.; Jia, D.; Wang, K.; Ma, W.; Xiao, C.; Song, E.; Chen, G.; Yu, Y.	Clinical efficacy of celecoxib for osteoarthritis and bone anchor assisted knee extensor reconstruction	2019	mixed population; at least 15% of pts <18yo
Abildgaard, J. T.; Chung, A. S.; Tokish, J. M.; Hatstrup, S. J.	Clinical Efficacy of Liposomal Bupivacaine: A Systematic Review of Prospective, Randomized Controlled Trials in Orthopaedic Surgery	2019	references reviewed
YaDeau, J. T.; LaSala, V. R.; Paroli, L.; Kahn, R. L.; Jules-Elysee, K. M.; Levine, D. S.; Wukovits, B. L.; Lipnitsky, J. Y.	Clonidine and analgesic duration after popliteal fossa nerve blockade: randomized, double-blind, placebo-controlled study	2008	irrelevant comparison: clonidine vs. clonidine vs. control
Gorgias, N. K.; Maidatsi, P. G.; Kyriakidis, A. M.; Karakoulas, K. A.; Alvanos, D. N.; Giala, M. M.	Clonidine versus ketamine to prevent tourniquet pain during intravenous regional anesthesia with lidocaine	2001	irrelevant comparison; clonidine vs ketamine
Fleischman, A. N.; Tarabichi, M.; Foltz, C.; Makar, G.; Hozack, W. J.; Austin, M. S.; Chen, A. F.	Cluster-Randomized Trial of Opiate-Sparing Analgesia after Discharge from Elective Hip Surgery	2019	Irrelevant comparison; 2 day opiate supply vs 2 week opiate supply (both oxycodone and tramadol)
Healy, W. L.; Seidman, J.; Pfeifer, B. A.; Brown, D. G.	Cold compressive dressing after total knee arthroplasty	1994	non-RCT
von Plato, H.; Peltoniemi, M.; Kauhanen, P.; Loyttyneimi, E.; Hamunen, K.; Kontinen, V.	Combination of perineural and wound infusion after above knee amputation: A randomized, controlled multicenter study	2019	irrelevant comparison; placebo vs. local anesthetic infusion
Li, J.; Deng, X.; Jiang, T.	Combined femoral and sciatic nerve block versus femoral and local infiltration anesthesia for pain control after total knee arthroplasty: a meta-analysis of randomized controlled trials	2016	references reviewed
Jarrell, K.; McDonald, E.; Shakked, R.; Nicholson, K.; Kasper, V.; Raikin, S. M.	Combined Popliteal Catheter With Single-Injection vs Continuous-Infusion Saphenous Nerve Block for Foot and Ankle Surgery	2018	irrelevant comparison; block vs block
Rahimzadeh, P.; Faiz, S. H. R.; Imani, F.; Derakhshan, P.; Amniati, S.	Comparative addition of dexmedetomidine and fentanyl to intrathecal bupivacaine in orthopedic procedure in lower limbs	2018	irrelevant comparison: dexmedetomide vs opioids
Sankineani, S. R.; Reddy, A. R. C.; Ajith Kumar, K. S.; Eachempati, K. K.; Reddy, A. V. G.	Comparative analysis of influence of adductor canal block and multimodal periarticular infiltration versus adductor canal block alone on pain and knee range of movement after total knee arthroplasty: a prospective non-randomised study	2018	irrelevant comparison: multimodal periarticular infiltration vs. control

Winkler, S.; Springorum, H. R.; Vaitl, T.; Handel, M.; Barta, S.; Kehl, V.; Craiovan, B.; Grifka, J.	Comparative clinical study of the prophylaxis of heterotopic ossifications after total hip arthroplasty using etoricoxib or diclofenac	2016	work group exclusion; not focusing on pain relief
Saryazdi, H.; Yazdani, A.; Sajedi, P.; Aghadavoudi, O.	Comparative evaluation of adding different opiates (morphine, meperidine, buprenorphine, or fentanyl) to lidocaine in duration and quality of axillary brachial plexus block	2015	<30 pts per group
Pareek, A.; Chandurkar, N.; Gupta, A.; Desai, Y.; Kumar, S. H.; Swamy, A.; Sirsikar, A.	Comparative evaluation of efficacy and safety of etodolac and diclofenac sodium injection in patients with postoperative orthopedic pain	2011	work group exclusion; etodolac not approved in US
Naaz, S.; Shukla, U.; Srivastava, S.; Ozair, E.; Asghar, A.	A Comparative Study of Analgesic Effect of Intrathecal Nalbuphine and Fentanyl as Adjuvant in Lower Limb Orthopaedic Surgery	2017	work group exclusion; not comparison of interest
Levine, M.; McElroy, K.; Stakich, V.; Cicco, J.	Comparing conventional physical therapy rehabilitation with neuromuscular electrical stimulation after TKA	2013	confounding treatment; home NMES and ROM exercises vs PT guided multimodal
Parvizrad, R.; Pakniyat, A.; Malekianzadeh, B.; Almasi-Hashiani, A.	Comparing the analgesic effect of intranasal with intravenous ketamine in isolated orthopedic trauma: A randomized clinical trial	2017	irrelevant comparison; intra-nasal vs IV
Jazayeri, S. M.; Mosaffa, F.; Abbasian, M.; Hosseinzadeh, H. R.	Comparing the efficacy of intra-articular application of morphine and tramadol on postoperative pain after arthroscopic knee surgery	2012	work group exclusion; intervention not used in US
Uribe, A. A.; Arbona, F. L.; Flanigan, D. C.; Kaeding, C. C.; Palettas, M.; Bergese, S. D.	Comparing the Efficacy of IV Ibuprofen and Ketorolac in the Management of Postoperative Pain Following Arthroscopic Knee Surgery. A Randomized Double-Blind Active Comparator Pilot Study	2018	< 30 per target group
Liu, P.; Wu, Y.; Liang, Z.; Deng, Y.; Meng, Q.	Comparing the efficacy of pain managements after total hip arthroplasty: A network meta-analysis	2019	references reviewed
Arti, H.; Mehdi nasab, S. A.	The comparison effects of intra-articular injection of different opioids on postoperative pain relieve after arthroscopic anterior cruciate ligament reconstruction: A randomized clinical trial study	2011	work group exclusion; intervention not used in US
Woolf, S. K.; Barfield, W. R.; Merrill, K. D.; McBryde, A. M., Jr.	Comparison of a continuous temperature-controlled cryotherapy device to a simple icing regimen following outpatient knee arthroscopy	2008	<60 total pts
Desgagnes, M. C.; Levesque, S.; Dion, N.; Nadeau, M. J.; Cote, D.; Brassard, J.; Nicole, P. C.; Turgeon, A. F.	A comparison of a single or triple injection technique for ultrasound-guided infraclavicular block: a prospective randomized controlled study	2009	irrelevant comparison: single injection vs. triple injection
Deleuze, A.; Gentili, M. E.; Marret, E.; Lamonerie, L.; Bonnet, F.	A comparison of a single-stimulation lateral infraclavicular plexus block with a triple-stimulation axillary block	2003	irrelevant comparison; block vs. block

Zhao, Y.; Huang, Z.; Ma, W.	Comparison of adductor canal block with local infiltration analgesia in primary total knee arthroplasty: A meta-analysis of randomized controlled trials	2019	References Reviewed
Serino, J.; Mohamadi, A.; Orman, S.; McCormick, B.; Hanna, P.; Weaver, M. J.; Harris, M. B.; Nazarian, A.; von Keudell, A.	Comparison of adverse events and postoperative mobilization following knee extensor mechanism rupture repair: A systematic review and network meta-analysis	2017	references reviewed
Gupta, B.; Verma, R. K.; Kumar, S.; Chaudhary, G.	Comparison of Analgesic Efficacy of Dexmedetomidine and Midazolam as Adjuncts to Lignocaine for Intravenous Regional Anesthesia	2017	irrelevant comparison; block vs. block
Baskan, S.; Cankaya, D.; Unal, H.; Yoldas, B.; Taspinar, V.; Deveci, A.; Tabak, Y.; Baydar, M.	Comparison of continuous interscalene block and subacromial infusion of local anesthetic for postoperative analgesia after open shoulder surgery	2017	irrelevant comparison; local infusion vs block
Koltka, K.; Koknel-Talu, G.; Asik, M.; Ozyalcin, S.	Comparison of efficacy of intraarticular application of magnesium, levobupivacaine and lornoxicam with placebo in arthroscopic surgery	2011	irrelevant comparison; intrarticular injections vs. injections
Dauri, M.; Polzoni, M.; Fabbi, E.; Sidiropoulou, T.; Servetti, S.; Coniglione, F.; Mariani, P.; Sabato, A. F.	Comparison of epidural, continuous femoral block and intraarticular analgesia after anterior cruciate ligament reconstruction	2003	irrelevant comparison; local infusion vs block
Yousef, A. A.; Atef, A. M.; Awais, W. M.	Comparison of fentanyl versus meperidine as supplements to epidural clonidine-bupivacaine in patients with lower limb orthopedic surgery under combined spinal epidural anesthesia	2015	irrelevant comparison: opioid vs clonidine
Demoulin, C.; Brouwers, M.; Darot, S.; Gillet, P.; Crielaard, J. M.; Vanderthommen, M.	Comparison of gaseous cryotherapy with more traditional forms of cryotherapy following total knee arthroplasty	2012	<30 per target group
Hadzic, A.; Arliss, J.; Kerimoglu, B.; Karaca, P. E.; Yufa, M.; Claudio, R. E.; Vloka, J. D.; Rosenquist, R.; Santos, A. C.; Thys, D. M.	A comparison of infraclavicular nerve block versus general anesthesia for hand and wrist day-case surgeries	2004	irrelevant comparison: block vs GA
Rao, S. K.; Rao, P. S.	Comparison of intra-articular analgesics for analgesia after arthroscopic knee surgery	2005	irrelevant comparison: ketorolac vs bupivacaine
Sivapurapu, V.; Murugharaj, S. S.; Venkata, S. S. P.	Comparison of intra-articular analgesics in arthroscopic anterior cruciate ligament reconstruction surgeries: A randomized controlled trial	2017	Irrelevant comparisons; opioid vs control and opioid vs clonidine

Wang, X.; Jia, D.; Chen, X.; Xu, Y.	Comparison of intra-articular low-dose sufentanil, ropivacaine, and combined sufentanil and ropivacaine on post-operative analgesia of isolated anterior cruciate ligament reconstruction	2013	<30 pts per group, irrelevant comparison; opioid vs control
Jia, X. F.; Ji, Y.; Huang, G. P.; Zhou, Y.; Long, M.	Comparison of intrathecal and local infiltration analgesia by morphine for pain management in total knee and hip arthroplasty: A meta-analysis of randomized controlled trial	2017	references reviewed
Kumar, B.; Williams, A.; Liddle, D.; Verghese, M.	Comparison of intrathecal bupivacaine-fentanyl and bupivacaine-butorphanol mixtures for lower limb orthopedic procedures	2011	work group exclusion; not comparison of interest
Ismail, E. A.; Sayed, J. A.; Bakri, M. H.; Mahfouz, R. Z.	Comparison of intrathecal versus intra-articular dexmedetomidine as an adjuvant to bupivacaine on postoperative pain following knee arthroscopy: a randomized clinical trial	2017	irrelevant comparison; local vs block
Sun, L.; Zhu, X.; Zou, J.; Li, Y.; Han, W.	Comparison of intravenous and oral acetaminophen for pain control after total knee and hip arthroplasty: A systematic review and meta-analysis	2018	references reviewed
Cevik, E.; Bilgic, S.; Kilic, E.; Cinar, O.; Hasman, H.; Acar, A. Y.; Eroglu, M.	Comparison of ketamine-low-dose midazolam with midazolam-fentanyl for orthopedic emergencies: a double-blind randomized trial	2013	work group exclusion; comparison not of interest
Cao, X.; Pan, F.	Comparison of liposomal bupivacaine infiltration versus interscalene nerve block for pain control in total shoulder arthroplasty: A meta-analysis of randomized control trails	2017	references reviewed
Ma, L. P.; Qi, Y. M.; Zhao, D. X.	Comparison of local infiltration analgesia and sciatic nerve block for pain control after total knee arthroplasty: a systematic review and meta-analysis	2017	references reviewed
Fan, L.; Zhu, C.; Zan, P.; Yu, X.; Liu, J.; Sun, Q.; Li, G.	The Comparison of Local Infiltration Analgesia with Peripheral Nerve Block following Total Knee Arthroplasty (TKA): A Systematic Review with Meta-Analysis	2015	references reviewed
Yan, H.; Cang, J.; Xue, Z.; Lu, J.; Wang, H.	Comparison of local infiltration and epidural analgesia for postoperative pain control in total knee arthroplasty and total hip arthroplasty: A systematic review and meta-analysis	2016	references reviewed
Franceschi, F.; Rizzello, G.; Cataldo, R.; Denaro, V.	Comparison of morphine and ropivacaine following knee arthroscopy	2001	Irrelevant comparison; opioid vs control, opioid vs placebo
Liu, S. Q.; Chen, X.; Yu, C. C.; Weng, C. W.; Wu, Y. Q.; Xiong, J. C.; Xu, S. H.	Comparison of periarticular anesthesia with liposomal bupivacaine with femoral nerve block for pain control after total knee arthroplasty: A PRISMA-compliant meta-analysis	2017	references reviewed

Wang, X.; Xiao, L.; Wang, Z.; Zhao, G.; Ma, J.	Comparison of peri-articular liposomal bupivacaine and standard bupivacaine for postsurgical analgesia in total knee arthroplasty: A systematic review and meta-analysis	2017	references reviewed
Zhang, L. K.; Ma, J. X.; Kuang, M. J.; Ma, X. L.	Comparison of Periarticular Local Infiltration Analgesia With Femoral Nerve Block for Total Knee Arthroplasty: a Meta-Analysis of Randomized Controlled Trials	2018	references reviewed
Wang, C.; Cai, X. Z.; Yan, S. G.	Comparison of Periarticular Multimodal Drug Injection and Femoral Nerve Block for Postoperative Pain Management in Total Knee Arthroplasty: A Systematic Review and Meta-Analysis	2015	references reviewed
Yi, A.; Villacis, D.; Yalamanchili, R.; Hatch, G. F., 3rd	A Comparison of Rehabilitation Methods After Arthroscopic Rotator Cuff Repair: A Systematic Review	2015	references reviewed
Niemi, T. T.; Neuvonen, P. J.; Rosenberg, P. H.	Comparison of ropivacaine 2 mg ml <sup>-1</sup> and prilocaine 5 mg ml <sup>-1</sup> for i.v. regional anaesthesia in outpatient surgery	2006	irrelevant comparison: iv vs iv
Yoshida, Y.; Ikuno, K.; Shomoto, K.	Comparison of the Effect of Sensory-Level and Conventional Motor-Level Neuromuscular Electrical Stimulations on Quadriceps Strength After Total Knee Arthroplasty: A Prospective Randomized Single-Blind Trial	2017	<30 pts per target group
Onda, A.; Ogoshi, A.; Itoh, M.; Nakagawa, T.; Kimura, M.	Comparison of the effects of treatment with celecoxib, loxoprofen, and acetaminophen on postoperative acute pain after arthroscopic knee surgery: A randomized, parallel-group trial	2016	work group exclusion; not comparison of interest
Alexander, R.; El-Moalem, H. E.; Gan, T. J.	Comparison of the morphine-sparing effects of diclofenac sodium and ketorolac tromethamine after major orthopedic surgery	2002	published before 2010
Green, R. J.; Chambers, J.; Thomas, P. W.; Monnery, L.; Titley, G.; Doyle, T.	Comparison of the relative analgesic efficacies of epidural or intramuscular diamorphine following total knee arthroplasty	2007	irrelevant comparison; block vs block
Kang, C.; Kim, S. B.; Heo, Y. M.; Won, Y. G.; Oh, B. H.; Jun, J. B.; Lee, G. S.	Comparison of Time to Operation and Efficacies of Ultrasound-Guided Nerve Block and General Anesthesia in Emergency External Fixation of Lower Leg Fractures (AO 42, 43, 44)	2017	irrelevant comparison; local infiltration vs. general anesthesia
Unver, B.; Karatosun, V.; Gunal, I.; Angin, S.	Comparison of two different rehabilitation programmes for thrust plate prosthesis: a randomized controlled study	2004	<30 pts per group
Raaben, M.; Redzwan, S.; Augustine, R.; Blokhuis, T. J.	COMplex Fracture Orthopedic Rehabilitation (COMFORT) - Real-time visual biofeedback on weight bearing versus standard training methods in the treatment of proximal femur fractures in the elderly: study protocol for a multicenter randomized controlled trial	2018	Protocol study

Dizdarevic, A.; Farah, F.; Ding, J.; Shah, S.; Bryan, A.; Kahn, M.; Kaye, A. D.; Gritsenko, K.	A Comprehensive Review of Analgesia and Pain Modalities in Hip Fracture Pathogenesis	2019	References Reviewed
Song, M.; Sun, X.; Tian, X.; Zhang, X.; Shi, T.; Sun, R.; Dai, W.	Compressive cryotherapy versus cryotherapy alone in patients undergoing knee surgery: a meta-analysis	2016	references reviewed
Lund, J.; Jenstrup, M. T.; Jaeger, P.; Sorensen, A. M.; Dahl, J. B.	Continuous adductor-canal-blockade for adjuvant post-operative analgesia after major knee surgery: preliminary results	2011	References Reviewed
Kampe, S.; Veltkamp, A.; Kiencke, P.; Tralls, P.; Konig, D. P.; Kasper, S. M.	Continuous epidural infusion of ropivacaine with sufentanil 1.5 microg x mL(-1) for postoperative analgesia after total knee replacement	2003	letter to editor
Dauri, M.; Fabbi, E.; Mariani, P.; Faria, S.; Carpenedo, R.; Sidiropoulou, T.; Coniglione, F.; Silvi, M. B.; Sabato, A. F.	Continuous femoral nerve block provides superior analgesia compared with continuous intra-articular and wound infusion after anterior cruciate ligament reconstruction	2009	irrelevant comparison: LIA vs control
Webb, D.; Guttmann, D.; Cawley, P.; Lubowitz, J. H.	Continuous infusion of a local anesthetic versus interscalene block for postoperative pain control after arthroscopic shoulder surgery	2007	irrelevant comparison; local infusion vs block
Elliot, R.; Pearce, C. J.; Seifert, C.; Calder, J. D.	Continuous infusion versus single bolus popliteal block following major ankle and hindfoot surgery: a prospective, randomized trial	2010	irrelevant comparison; local vs control
Oh, J. H.; Kim, W. S.; Kim, J. Y.; Gong, H. S.; Rhee, K. Y.	Continuous intralesional infusion combined with interscalene block was effective for postoperative analgesia after arthroscopic shoulder surgery	2007	irrelevant comparison; local vs IV
Saito, N.; Horiuchi, H.; Kobayashi, S.; Nawata, M.; Takaoka, K.	Continuous local cooling for pain relief following total hip arthroplasty	2004	<60 total pts
Keijsers, R.; van den Bekerom, M.; van Delft, R.; van Lotten, M.; Rademakers, M.; Nolte, P. A.	Continuous Local Infiltration Analgesia after TKA: A Meta-Analysis	2016	References Reviewed
Sun, X. L.; Zhao, Z. H.; Ma, J. X.; Li, F. B.; Li, Y. J.; Meng, X. M.; Ma, X. L.	Continuous Local Infiltration Analgesia for Pain Control After Total Knee Arthroplasty: A Meta-analysis of Randomized Controlled Trials	2015	references reviewed
Bruun-Olsen, V.; Heiberg, K. E.; Mengshoel, A. M.	Continuous passive motion as an adjunct to active exercises in early rehabilitation following total knee arthroplasty - a randomized controlled trial	2009	irrelevant comparison; Passive motion plus active exercise vs active exercise alone. No early ambulation group
Howard, J. S.; Mattacola, C. G.; Romine, S. E.; Lattermann, C.	Continuous Passive Motion, Early Weight Bearing, and Active Motion following Knee Articular Cartilage Repair: Evidence for Clinical Practice	2010	references reviewed



Stessel, B.; Theunissen, M.; Fiddelers, A. A.; Joosten, E. A.; Kessels, A. G.; Gramke, H. F.; Marcus, M. A.	Controlled-release oxycodone versus naproxen at home after ambulatory surgery: a randomized controlled trial	2014	mixed population; includes hernia pts
Parvataneni, H. K.; Shah, V. P.; Howard, H.; Cole, N.; Ranawat, A. S.; Ranawat, C. S.	Controlling pain after total hip and knee arthroplasty using a multimodal protocol with local periarticular injections: a prospective randomized study	2007	full description of text not available
Mont, M. A.; Beaver, W. B.; Dysart, S. H.; Barrington, J. W.; Del Gaizo, D. J.	Corrigendum to "Local Infiltration Analgesia With Liposomal Bupivacaine Improves Pain Scores and Reduces Opioid Use After Total Knee Arthroplasty: Results of a Randomized Controlled Trial" [Journal of Arthroplasty 33 (2018) 90-96]	2019	Corrigendum
Chang, K. V.; Hung, C. Y.; Han, D. S.; Chen, W. S.; Wang, T. G.; Chien, K. L.	Corrigendum. Early versus delayed passive range of motion exercise for arthroscopic rotator cuff repair: a meta-analysis of randomized controlled trials	2015	Corrigendum
Tilleul, P.; Weickmans, H.; Sean, P. T.; Lienhart, A.; Beaussier, M.	Cost analysis applied to postoperative analgesia regimens: a comparison between parecoxib and propacetamol	2007	not target population; hernia pts
Larsen, K.; Hansen, T. B.; Thomsen, P. B.; Christiansen, T.; Soballe, K.	Cost-effectiveness of accelerated perioperative care and rehabilitation after total hip and knee arthroplasty	2009	irrelevant topic; multimodal PT protocols
Vasileiadis, G. I.; Sioutis, I. C.; Mavrogenis, A. F.; Vlasis, K.; Babis, G. C.; Papagelopoulos, P. J.	COX-2 inhibitors for the prevention of heterotopic ossification after THA	2011	references reviewed
Raynor, M. C.; Pietrobon, R.; Guller, U.; Higgins, L. D.	Cryotherapy after ACL reconstruction: a meta-analysis	2005	References Reviewed
Adie, S.; Naylor, J. M.; Harris, I. A.	Cryotherapy after total knee arthroplasty a systematic review and meta-analysis of randomized controlled trials	2010	references reviewed
Thacoor, A.; Sandiford, N. A.	Cryotherapy following total knee arthroplasty: What is the evidence?	2019	references reviewed
Adie, S.; Kwan, A.; Naylor, J. M.; Harris, I. A.; Mittal, R.	Cryotherapy following total knee replacement	2012	systematic review; bib reviewed
Ni, S. H.; Jiang, W. T.; Guo, L.; Jin, Y. H.; Jiang, T. L.; Zhao, Y.; Zhao, J.	Cryotherapy on postoperative rehabilitation of joint arthroplasty	2015	References Reviewed
Radkowski, C. A.; Pietrobon, R.; Vail, T. P.; Nunley, J. A., 2nd; Jain, N. B.; Easley, M. E.	Cryotherapy temperature differences after total knee arthroplasty: a prospective randomized trial	2007	<30 pts per group

Chan, K.; MacDermid, J. C.; Hoppe, D. J.; Ayeni, O. R.; Bhandari, M.; Foote, C. J.; Athwal, G. S.	Delayed versus early motion after arthroscopic rotator cuff repair: a meta-analysis	2014	references reviewed
Gasbjerg, K. S.; Hagi-Pedersen, D.; Lunn, T. H.; Jakobsen, J. C.; Overgaard, S.; Pedersen, N. A.; Bagger, J.; Lindholm, P.; Brorson, S.; Schroder, H. M.; Thybo, K. H.; Mathiesen, O.	DEX-2-TKA-DEXamethasone twice for pain treatment after Total Knee Arthroplasty: A protocol for a randomized, blinded, three-group multicentre clinical trial	2019	protocol
Rautoma, P.; Santanen, U.; Avela, R.; Luurila, H.; Perhoniemi, V.; Erkola, O.	Diclofenac premedication but not intra-articular ropivacaine alleviates pain following day-case knee arthroscopy	2000	published before 2010
Bain, G. I.; Rudkin, G.; Comley, A. S.; Heptinstall, R. J.; Chittleborough, M.	Digitally assisted acromioplasty: the effect of interscalene block on this new surgical technique	2001	irrelevant topic: ISBP block + digitally assisted acromioplasty
Sun, H.; Li, S.; Wang, K.; Zhou, J.; Wu, G.; Fang, S.; Sun, X.	Do liposomal bupivacaine infiltration and interscalene nerve block provide similar pain relief after total shoulder arthroplasty: a systematic review and meta-analysis	2018	references reviewed
Coronado, R. A.; Bird, M. L.; Van Hoy, E. E.; Huston, L. J.; Spindler, K. P.; Archer, K. R.	Do psychosocial interventions improve rehabilitation outcomes after anterior cruciate ligament reconstruction? A systematic review	2018	References Reviewed
Westenberg, R. F.; Zale, E. L.; Heinhuis, T. J.; Ozkan, S.; Nazzal, A.; Lee, S. G.; Chen, N. C.; Vranceanu, A. M.	Does a Brief Mindfulness Exercise Improve Outcomes in Upper Extremity Patients? A Randomized Controlled Trial	2018	mixed population; 46% surgery
Hubbard, T. J.; Denegar, C. R.	Does Cryotherapy Improve Outcomes With Soft Tissue Injury?	2004	references reviewed
Shen, C.; Tang, Z. H.; Hu, J. Z.; Zou, G. Y.; Xiao, R. C.; Yan, D. X.	Does immobilization after arthroscopic rotator cuff repair increase tendon healing? A systematic review and meta-analysis	2014	references reviewed
Kuchalik, J.; Magnuson, A.; Tina, E.; Gupta, A.	Does local infiltration analgesia reduce peri-operative inflammation following total hip arthroplasty? A randomized, double-blind study	2017	no outcome of interest
Macfarlane, A. J.; Prasad, G. A.; Chan, V. W.; Brull, R.	Does regional anaesthesia improve outcome after total hip arthroplasty? A systematic review	2009	references reviewed
Macfarlane, A. J.; Prasad, G. A.; Chan, V. W.; Brull, R.	Does regional anesthesia improve outcome after total knee arthroplasty?	2009	references reviewed

Wittig-Wells, D.; Johnson, I.; Samms-McPherson, J.; Thankachan, S.; Titus, B.; Jacob, A.; Higgins, M.	Does the use of a brief cryotherapy intervention with analgesic administration improve pain management after total knee arthroplasty?	2015	<60 total pts
Tedesco, D.; Gori, D.; Desai, K. R.; Asch, S.; Carroll, I. R.; Curtin, C.; McDonald, K. M.; Fantini, M. P.; Hernandez-Boussard, T.	Drug-Free Interventions to Reduce Pain or Opioid Consumption After Total Knee Arthroplasty: A Systematic Review and Meta-analysis	2017	systematic review; bib reviewed
Koh, I. J.; Kim, M. S.; Sohn, S.; Song, K. Y.; Choi, N. Y.; In, Y.	Duloxetine Reduces Pain and Improves Quality of Recovery Following Total Knee Arthroplasty in Centrally Sensitized Patients: A Prospective, Randomized Controlled Study	2019	work group exclusion; uses unvalidated scale to select population; not applicable to practice
Keene, D. J.; Williamson, E.; Bruce, J.; Willett, K.; Lamb, S. E.	Early ankle movement versus immobilization in the postoperative management of ankle fracture in adults: a systematic review and meta-analysis	2014	references reviewed
McCormack, R.; Bovard, J.	Early functional rehabilitation or cast immobilisation for the postoperative management of acute Achilles tendon rupture? A systematic review and meta-analysis of randomised controlled trials	2015	references reviewed
Zhao, J. G.; Meng, X. H.; Liu, L.; Zeng, X. T.; Kan, S. L.	Early functional rehabilitation versus traditional immobilization for surgical Achilles tendon repair after acute rupture: a systematic review of overlapping meta-analyses	2017	references reviewed
Bade, M. J.; Struessel, T.; Dayton, M.; Foran, J.; Kim, R. H.; Miner, T.; Wolfe, P.; Kohrt, W. M.; Dennis, D.; Stevens-Lapsley, J. E.	Early High-Intensity Versus Low-Intensity Rehabilitation After Total Knee Arthroplasty: A Randomized Controlled Trial	2017	irrelevant topic; multi modal PT
Munin, M. C.; Rudy, T. E.; Glynn, N. W.; Crossett, L. S.; Rubash, H. E.	Early inpatient rehabilitation after elective hip and knee arthroplasty	1998	irrelevant topic; multi modal PT
Harding, P.; Rasekaba, T.; Smirneos, L.; Holland, A. E.	Early mobilisation for elbow fractures in adults	2011	references reviewed
Vioreanu, M.; Dudeney, S.; Hurson, B.; Kelly, E.; O'Rourke, K.; Quinlan, W.	Early mobilization in a removable cast compared with immobilization in a cast after operative treatment of ankle fractures: a prospective randomized study	2007	<30 per target group
Thomas, G.; Whalley, H.; Modi, C.	Early mobilization of operatively fixed ankle fractures: a systematic review	2009	references reviewed
Guerra, M. L.; Singh, P. J.; Taylor, N. F.	Early mobilization of patients who have had a hip or knee joint replacement reduces length of stay in hospital: a systematic review	2015	references reviewed

Riboh, J. C.; Garrigues, G. E.	Early passive motion versus immobilization after arthroscopic rotator cuff repair	2014	references reviewed
Fitz, W.; Shukla, P.; Li, L.; Scott, R. D.	Early Regain of Function and Proprioceptive Improvement Following Knee Arthroplasty	2018	Irrelevant comparison; active vs passive motion, non-early mobilization
Smith, T. O.; Hedges, C.; MacNair, R.; Schankat, K.	Early rehabilitation following less invasive surgical stabilisation plate fixation for distal femoral fractures	2009	References Reviewed
Houck, D. A.; Kraeutler, M. J.; Schuette, H. B.; McCarty, E. C.; Bravman, J. T.	Early Versus Delayed Motion After Rotator Cuff Repair: A Systematic Review of Overlapping Meta-analyses	2017	references reviewed
Kluczynski, M. A.; Nayyar, S.; Marzo, J. M.; Bisson, L. J.	Early Versus Delayed Passive Range of Motion After Rotator Cuff Repair: A Systematic Review and Meta-analysis	2015	references reviewed
Chang, K. V.; Hung, C. Y.; Han, D. S.; Chen, W. S.; Wang, T. G.; Chien, K. L.	Early Versus Delayed Passive Range of Motion Exercise for Arthroscopic Rotator Cuff Repair: A Meta-analysis of Randomized Controlled Trials	2015	references reviewed
Gallagher, B. P.; Bishop, M. E.; Tjoumakaris, F. P.; Freedman, K. B.	Early versus delayed rehabilitation following arthroscopic rotator cuff repair: A systematic review	2015	references reviewed
Heare, A.; Kramer, N.; Salib, C.; Mauffrey, C.	Early Versus Late Weight-Bearing Protocols for Surgically Managed Posterior Wall Acetabular Fractures	2017	references reviewed
Pitimana-aree, S.; Visalyaputra, S.; Komoltri, C.; Muangman, S.; Tiviraj, S.; Puangchan, S.; Immark, P.	An economic evaluation of bupivacaine plus fentanyl versus ropivacaine alone for patient-controlled epidural analgesia after total-knee replacement procedure: a double-blinded randomized study	2005	published before 2010
Miller, J.; Dunion, A.; Dunn, N.; Fitzmaurice, C.; Gamboa, M.; Myers, S.; Novak, P.; Poole, J.; Rice, K.; Riley, C.; Sandberg, R.; Taylor, D.; Gilmore, L.	Effect of a Brief Massage on Pain, Anxiety, and Satisfaction With Pain Management in Postoperative Orthopaedic Patients	2015	<60 total pts
Schmal, H.; Larsen, A. H.; Froberg, L.; Erichsen, J. L.; Madsen, C. F.; Pedersen, L.	The effect of a heel-unloading orthosis in short-term treatment of calcaneus fractures on physical function, quality of life and return to work - study protocol for a randomized controlled trial	2019	Protocol study
Lee, J. K.; Chung, K. S.; Choi, C. H.	The effect of a single dose of preemptive pregabalin administered with COX-2 inhibitor: a trial in total knee arthroplasty	2015	<60 total pts
Zietek, P.; Zietek, J.; Szczypior, K.; Safranow, K.	Effect of adding one 15-minute-walk on the day of surgery to fast-track rehabilitation after total knee arthroplasty: a randomized, single-blind study	2015	irrelevant comparison; walking frequency

Timmers, T.; Janssen, L.; van der Weegen, W.; Das, D.; Marijnissen, W. J.; Hannink, G.; van der Zwaard, B. C.; Plat, A.; Thomassen, B.; Swen, J. W.; Kool, R. B.; Lambers Heerspink, F. O.	The Effect of an App for Day-to-Day Postoperative Care Education on Patients With Total Knee Replacement: Randomized Controlled Trial	2019	irrelevant comparison; day to day app vs weekly education
Bondy, L. R.; Sims, N.; Schroeder, D. R.; Offord, K. P.; Narr, B. J.	The effect of anesthetic patient education on preoperative patient anxiety	1999	No outcomes of interest
Patil, S.; Debata, D.; Doshi, C.; Vyas, V.; Sinha, S.	Effect of buprenorphine as an adjunct with plain local anesthetic solution in supraclavicular brachial plexus block on quality and duration of postoperative analgesia	2015	<60 total pts
Bert, J. M.; Stark, J. G.; Maschka, K.; Chock, C.	The effect of cold therapy on morbidity subsequent to arthroscopic lateral retinacular release	1991	mixed population
Scarcella, J. B.; Cohn, B. T.	The effect of cold therapy on the postoperative course of total hip and knee arthroplasty patients	1995	<60 Pts total
Barlow, T.; Downham, C.; Barlow, D.	The effect of complementary therapies on post-operative pain control in ambulatory knee surgery: a systematic review	2013	References Reviewed
Mau-Moeller, A.; Behrens, M.; Finze, S.; Bruhn, S.; Bader, R.; Mittelmeier, W.	The effect of continuous passive motion and sling exercise training on clinical and functional outcomes following total knee arthroplasty: a randomized active-controlled clinical study	2014	<30 pts per group
Lee, J. J.; Choi, S. S.; Lee, M. K.; Lim, B. G.; Hur, W.	Effect of continuous psoas compartment block and intravenous patient controlled analgesia on postoperative pain control after total knee arthroplasty	2012	< 60 total pts
Packiasabapathy, S. K.; Kashyap, L.; Arora, M. K.; Batra, R. K.; Mohan, V. K.; Prasad, G.; Yadav, C. S.	Effect of dexmedetomidine as an adjuvant to bupivacaine in femoral nerve block for perioperative analgesia in patients undergoing total knee replacement arthroplasty: A dose-response study	2017	irrelevant combination: bupivacaine plus dexmedetomidine
Swank, K. R.; DiBartola, A. C.; Everhart, J. S.; Kaeding, C. C.; Magnussen, R. A.; Flanigan, D. C.	The Effect of Femoral Nerve Block on Quadriceps Strength in Anterior Cruciate Ligament Reconstruction: A Systematic Review	2017	references reviewed
Zhai, L.; Song, Z.; Liu, K.	The Effect of Gabapentin on Acute Postoperative Pain in Patients Undergoing Total Knee Arthroplasty: A Meta-Analysis	2016	references reviewed
Saisai, H.	The effect of hydromorphone as an adjuvant to ropivacaine in brachial plexus block	2019	letter to editor

Reuben, S. S.; Ekman, E. F.	The effect of initiating a preventive multimodal analgesic regimen on long-term patient outcomes for outpatient anterior cruciate ligament reconstruction surgery	2007	published before 2010
Jawish, R.; Najdi, H.; Abi Safi, C.; Chameseddine, A.	The effect of intra-articular Tenoxicam on knee effusion after arthroscopy	2015	irrelevant topic; Non-RCT
Komurcu, E.; Kiraz, H. A.; Kaymaz, B.; Golge, U. H.; Nusran, G.; Goksel, F.; Sahin, H.; Omur, D.; Hanci, V.	The effect of intraoperative sounds of saw and hammer on psychological condition in patients with total knee arthroplasty: prospective randomized study	2015	irrelevant comparison: GA vs SA
Li, D.; Wang, C.; Yang, Z.; Kang, P.	Effect of Intravenous Corticosteroids on Pain Management and Early Rehabilitation in Patients Undergoing Total Knee or Hip Arthroplasty: A Meta-Analysis of Randomized Controlled Trials	2018	references reviewed
Xu, J.; Qu, Y.; Li, H.; Jiang, T.; Zheng, C.; Wang, B.; Shen, P.	Effect of ketorolac in intra-articular injection analgesia for postoperative pain in patients undergoing shoulder arthroscopy: a pilot-controlled clinical study	2019	work group exclusion; irrelevant comparison
Cetinkaya, F.	Effect of Listening to Music on Postoperative Cognitive Function in Older Adults After Hip or Knee Surgery: A Randomized Controlled Trial	2019	No outcomes of interest
Liu, G.; Gong, M.; Wang, Y.; Xiang, Z.	Effect of Methylprednisolone on Pain Management in Total Knee or Hip Arthroplasty: A Systematic Review and Meta-Analysis of Randomized Controlled Trials	2018	References Reviewed
Zhang, Y.; Mi, F.; Zhao, H.; Xie, D.; Shi, X.	Effect of morphine added to multimodal cocktail on infiltration analgesia in total knee arthroplasty: A meta-analysis of randomized controlled trials	2019	references reviewed
Beckmann, J. T.; Wylie, J. D.; Potter, M. Q.; Maak, T. G.; Greene, T. H.; Aoki, S. K.	Effect of Naproxen Prophylaxis on Heterotopic Ossification Following Hip Arthroscopy: A Double-Blind Randomized Placebo-Controlled Trial	2015	work group exclusion; not focusing on pain relief
Demircioglu, D. T.; Paker, N.; Erbil, E.; Bugdayci, D.; Emre, T. Y.	The effect of neuromuscular electrical stimulation on functional status and quality of life after knee arthroplasty: a randomized controlled study	2015	Irrelevant comparison; NMES vs home exercise
Heidari, S. M.; Saghaei, M.; Hashemi, S. J.; Parvazinia, P.	Effect of oral ketamine on the postoperative pain and analgesic requirement following orthopedic surgery	2006	work group exclusion; not clinically relevant
Hah, J.; Mackey, S. C.; Schmidt, P.; McCue, R.; Humphreys, K.; Trafton, J.; Efron, B.; Clay, D.; Sharifzadeh, Y.; Ruchelli, G.; Goodman, S.; Huddleston, J.; Maloney, W. J.; Dirbas, F. M.; Shrager, J.;	Effect of Perioperative Gabapentin on Postoperative Pain Resolution and Opioid Cessation in a Mixed Surgical Cohort: A Randomized Clinical Trial	2018	Mixed surgical cohort

Costouros, J. G.; Curtin, C.; Carroll, I.			
Zhu, Y.; Wang, S.; Wu, H.; Wu, Y.	Effect of perioperative parecoxib on postoperative pain and local inflammation factors PGE2 and IL-6 for total knee arthroplasty: a randomized, double-blind, placebo-controlled study	2014	work group exclusion; intervention not used in US
Demir, U.; Ince, I.; Aksoy, M.; Dostbil, A.; Ari, M. A.; Sulak, M. M.; Kose, M.; Tanios, M.; Ozmen, O.	The Effect of Pre-emptive Dexketoprofen Administration on Postoperative Pain Management in Patients with Ultrasound Guided Interscalene Block in Arthroscopic Shoulder Surgery	2019	work group exclusion; intervention not used in US
Panah Khahi, M.; Yaghooti, A. A.; Marashi, S. H.; Nadjafi, A.	Effect of pre-emptive gabapentin on postoperative pain following lower extremity orthopaedic surgery under spinal anaesthesia	2011	work group exclusion; outcome prior to period of interest
Dong, J.; Li, W.; Wang, Y.	The effect of pregabalin on acute postoperative pain in patients undergoing total knee arthroplasty: A meta-analysis	2016	references reviewed
Bergin, C.; Speroni, K. G.; Travis, T.; Bergin, J.; Sheridan, M. J.; Kelly, K.; Daniel, M. G.	Effect of preoperative incentive spirometry patient education on patient outcomes in the knee and hip joint replacement population	2014	irrelevant topic; pre-admission education; not periop window
Farsi, Z.; Azarmi, S.	Effect of Roy's Adaptation Model-Guided Education on Coping Strategies of the Veterans with Lower Extremities Amputation: A Double-Blind Randomized Controlled Clinical Trial	2016	no outcomes interest; cognitive measures
Flor, H.; Denke, C.; Schaefer, M.; Grusser, S.	Effect of sensory discrimination training on cortical reorganisation and phantom limb pain	2001	non-orthopedic
Szekeres, M.; MacDermid, J. C.; Birmingham, T.; Grewal, R.; Lalone, E.	The Effect of Therapeutic Whirlpool and Hot Packs on Hand Volume During Rehabilitation After Distal Radius Fracture: A Blinded Randomized Controlled Trial	2017	work group exclusion; not comparison of interest
De Boer, A. S.; Van Lieshout, E. M. M.; Van Moolenbroek, G.; Den Hartog, D.; Verhofstad, M. H. J.	The effect of time to post-operative weightbearing on functional and clinical outcomes in adults with a displaced intra-articular calcaneal fracture; A systematic review and pooled analysis	2018	irrelevant topic; mixed group
Zhu, Y.; Feng, Y.; Peng, L.	Effect of transcutaneous electrical nerve stimulation for pain control after total knee arthroplasty: A systematic review and meta-analysis	2017	references reviewed

Lee, B. G.; Cho, N. S.; Rhee, Y. G.	Effect of two rehabilitation protocols on range of motion and healing rates after arthroscopic rotator cuff repair: aggressive versus limited early passive exercises	2012	irrelevant comparison; aggressive vs limited motion, does not address timing
Bayar, A.; Tuncay, I.; Atasoy, N.; Ayoglu, H.; Keser, S.; Ege, A.	The effect of watching live arthroscopic views on postoperative anxiety of patients	2008	Irrelevant outcome: only anxiety scores
Martimbianco, A. L.; Gomes da Silva, B. N.; de Carvalho, A. P.; Silva, V.; Torloni, M. R.; Peccin, M. S.	Effectiveness and safety of cryotherapy after arthroscopic anterior cruciate ligament reconstruction. A systematic review of the literature	2014	references reviewed
Rahimzadeh, P.; Faiz, S. H.; Ziyaeifard, M.; Niknam, K.	Effectiveness of adding ketamine to ropivacaine infusion via femoral nerve catheter after knee anterior cruciate ligament repair	2013	work group exclusion; safety concerns
Ortiz, M. I.; Monroy-Maya, R.; Soto-Rios, M.; Carrillo-Alarcon, L. C.; Ponce-Monter, H. A.; Rangel-Flores, E.; Loo-Estrada, J. J.; Izquierdo-Vega, J. A.; Sanchez-Gutierrez, M.	Effectiveness of diclofenac, ketorolac and etoricoxib in the treatment of acute pain from ankle fracture	2010	< 30 per target group
Donec, V.; Krisciunas, A.	The effectiveness of Kinesio Taping(R) after total knee replacement in early postoperative rehabilitation period. A randomized controlled trial	2014	irrelevant topic; KT taping
Yu, Z. X.; Yang, Z. Z.; Yao, L. L.	Effectiveness of liposome bupivacaine for postoperative pain control in total knee arthroplasty: A PRISMA-compliant meta-analysis of randomized controlled trials	2018	references reviewed
Campo-Prieto, P.; Rodriguez-Fuentes, G.	Effectiveness of mirror therapy in phantom limb pain: A literature review	2018	not published in English
Majid, N.; Lee, S.; Plummer, V.	The effectiveness of orthopedic patient education in improving patient outcomes: a systematic review protocol	2015	references reviewed
Lenssen, A. F.; Crijns, Y. H.; Waltje, E. M.; Roox, G. M.; van Steyn, M. J.; Geesink, R. J.; van den Brandt, P. A.; de Bie, R. A.	Effectiveness of prolonged use of continuous passive motion (CPM) as an adjunct to physiotherapy following total knee arthroplasty: design of a randomised controlled trial [ISRCTN85759656]	2006	protocol
Lenssen, T. A.; van Steyn, M. J.; Crijns, Y. H.; Waltje, E. M.; Roox, G. M.; Geesink, R. J.; van den Brandt, P. A.; De Bie, R. A.	Effectiveness of prolonged use of continuous passive motion (CPM), as an adjunct to physiotherapy, after total knee arthroplasty	2008	irrelevant comparison; continued post-op cpm vs control; not early motion



Leal-Blanquet, J.; Alentorn-Geli, E.; Gines-Cespedosa, A.; Martinez-Diaz, S.; Caceres, E.; Puig, L.	Effects of an educational audiovisual videodisc on patients' pre-operative expectations with total knee arthroplasty: a prospective randomized comparative study	2013	irrelevant topic; pre-admission education
Arti, H.; Arti, S.	The Effects of Intraarticular Opioids in pain relief after Arthroscopic Meniscectomy: A Randomized Clinical Trial Study	2013	work group exclusion; not comparison of interest
Leaper, D.	Effects of local and systemic warming on postoperative infections	2006	Irrelevant topic; combination of surgeries including general and urologic
Giaquinto, S.; Cacciato, A.; Minasi, S.; Sostero, E.; Amanda, S.	Effects of music-based therapy on distress following knee arthroplasty	2006	<60 total pts, irrelevant outcomes; anxiety and depression
Oh, Y. N.; Kim, K. N.; Jeong, M. A.; Kim, D. W.; Kim, J. Y.; Ki, H. S.	Effects of nefopam with fentanyl in intravenous patient-controlled analgesia after arthroscopic orthopedic surgery: a prospective double-blind randomized trial	2018	Irrelevant comparison; NSAID vs Nefopam (analgesic derivative, non-opioid, non-NSAID)
Kim, K. M.; Croy, T.; Hertel, J.; Saliba, S.	Effects of neuromuscular electrical stimulation after anterior cruciate ligament reconstruction on quadriceps strength, function, and patient-oriented outcomes: a systematic review	2010	references reviewed
Gan, J.; Tu, Q.; Miao, S.; Lei, T.; Cui, X.; Yan, J.; Zhang, J.	Effects of oxycodone applied for patient-controlled analgesia on postoperative cognitive function in elderly patients undergoing total hip arthroplasty: a randomized controlled clinical trial	2019	work group exclusion; intervention not used in US
Capdevila, X.; Barthelet, Y.; Biboulet, P.; Ryckwaert, Y.; Rubenovitch, J.; d'Athis, F.	Effects of perioperative analgesic technique on the surgical outcome and duration of rehabilitation after major knee surgery	1999	irrelevant comparison: CEI vs CFB vs PCA
Constantinescu, D. S.; Campbell, M. P.; Moatshe, G.; Vap, A. R.	Effects of Perioperative Nonsteroidal Anti-inflammatory Drug Administration on Soft Tissue Healing: A Systematic Review of Clinical Outcomes After Sports Medicine Orthopaedic Surgery Procedures	2019	references reviewed
Izdes, S.; Orhun, S.; Turanli, S.; Erkilic, E.; Kanbak, O.	The effects of preoperative inflammation on the analgesic efficacy of intraarticular piroxicam for outpatient knee arthroscopy	2003	published before 2010
Xie, L. Q.; Deng, Y. L.; Zhang, J. P.; Richmond, C. J.; Tang, Y.; Zhou, J.	Effects of Progressive Muscle Relaxation Intervention in Extremity Fracture Surgery Patients	2016	Irrelevant outcomes: anxiety and self-efficacy (psychological measure)
Machado, A. F.; Santana, E. F.; Tacani, P. M.; Liebano, R. E.	The effects of transcutaneous electrical nerve stimulation on tissue repair: A literature review	2012	references reviewed

Chen, Y.; Zhang, Y.; Zhu, Y. L.; Fu, P. L.	Efficacy and safety of an intra-operative intra-articular magnesium/ropivacaine injection for pain control following total knee arthroplasty	2009	irrelevant comparison; local vs control
Zhu, X.; Wang, F.; Ling, W.; Dai, X.	The Efficacy and Safety of Combined Adductor Canal Block with Periarticular Anesthetic Injection Following Primary Total Knee Arthroplasty: A Meta-Analysis	2019	References Reviewed
von Plato, H.; Kontinen, V.; Hamunen, K.	Efficacy and safety of epidural, continuous perineural infusion and adjuvant analgesics for acute postoperative pain after major limb amputation - a systematic review	2018	references reviewed
Shen, S.; Gao, Z.; Liu, J.	The efficacy and safety of methylprednisolone for pain control after total knee arthroplasty: A meta-analysis of randomized controlled trials	2018	references reviewed
Smith, T. W.; Binning, A. R.; Dahan, A.	Efficacy and safety of morphine-6-glucuronide (M6G) for postoperative pain relief: a randomized, double-blind study	2009	irrelevant comparison; opioid 10 mg, 20 mg, 30 mg vs placebo
Xu, C. P.; Li, X.; Wang, Z. Z.; Song, J. Q.; Yu, B.	Efficacy and safety of single-dose local infiltration of analgesia in total knee arthroplasty: a meta-analysis of randomized controlled trials	2014	references reviewed
Vidan, M.; Serra, J. A.; Moreno, C.; Riquelme, G.; Ortiz, J.	Efficacy of a comprehensive geriatric intervention in older patients hospitalized for hip fracture: a randomized, controlled trial	2005	multimodal interventions
Chai, X.; Liu, H.; You, C.; Wang, C.	Efficacy of Additional Corticosteroid in a Multimodal Cocktail for Postoperative Analgesia Following Total Knee Arthroplasty: A Meta-Analysis of Randomized Controlled Trials	2019	References Reviewed
Wada, T.; Yamauchi, M.; Oki, G.; Sonoda, T.; Yamakage, M.; Yamashita, T.	Efficacy of axillary nerve block in elbow arthroscopic surgery: a randomized trial	2014	< 20 per injection group
Li, Y.; Li, A.; Zhang, Y.	The efficacy of combined adductor canal block with local infiltration analgesia for pain control after total knee arthroplasty: A meta-analysis	2018	references reviewed
Waterman, B.; Walker, J. J.; Swaims, C.; Shortt, M.; Todd, M. S.; Machen, S. M.; Owens, B. D.	The efficacy of combined cryotherapy and compression compared with cryotherapy alone following anterior cruciate ligament reconstruction	2012	<60 total pts
Li, Y.; Chu, L.; Li, X.; Zhai, W.; Ma, Y.; He, Y.; Xu, Y.; Ding, S.; Gao, H.; Zhang, J.; Ye, B.; Wang, J.; Yao, J.; Wu, C.; Xiao, L.	Efficacy of different-frequency TEAS on acute pain after the total knee arthroplasty: a study protocol for a parallel group randomized trial	2019	protocol

Rostaminejad, A.; Behnammoghadam, M.; Rostaminejad, M.; Behnammoghadam, Z.; Bashti, S.	Efficacy of eye movement desensitization and reprocessing on the phantom limb pain of patients with amputations within a 24-month follow-up	2017	non orthopedic
Cai, L.; Song, Y.; Wang, Z.; She, W.; Luo, X.; Song, Y.	The efficacy of fascia iliaca compartment block for pain control after hip arthroplasty: A meta-analysis	2019	References Reviewed
Zhang, X. Y.; Ma, J. B.	The efficacy of fascia iliaca compartment block for pain control after total hip arthroplasty: a meta-analysis	2019	references reviewed
Fang, R.; Liu, Z.; Alijiang, A.; Jia, H.; Deng, Y.; Song, Y.; Meng, Q.	Efficacy of Intra-articular Local Anesthetics in Total Knee Arthroplasty	2015	references reviewed
Ma, H. H.; Chou, T. A.; Tsai, S. W.; Chen, C. F.; Wu, P. K.; Chen, W. M.	The efficacy of intraoperative periarticular injection in Total hip arthroplasty: a systematic review and meta-analysis	2019	references reviewed
Shi, S. B.; Wang, X. B.; Song, J. M.; Guo, S. F.; Chen, Z. X.; Wang, Y.	Efficacy of intravenous acetaminophen in multimodal management for pain relief following total knee arthroplasty: a meta-analysis	2018	references reviewed
Pan, L.; Shen, Y.; Ma, T.; Xue, H.	The efficacy of ketamine supplementation on pain management for knee arthroscopy: A meta-analysis of randomized controlled trials	2019	references reviewed
Kolade, O.; Patel, K.; Ihejirika, R.; Press, D.; Friedlander, S.; Roberts, T.; Rokito, A. S.; Virk, M. S.	Efficacy of liposomal bupivacaine in shoulder surgery: a systematic review and meta-analysis	2019	References Reviewed
Yayac, M.; Li, W. T.; Ong, A. C.; Courtney, P. M.; Saxena, A.	The Efficacy of Liposomal Bupivacaine Over Traditional Local Anesthetics in Periarticular Infiltration and Regional Anesthesia During Total Knee Arthroplasty: A Systematic Review and Meta-Analysis	2019	References Reviewed
Kuang, M. J.; Du, Y.; Ma, J. X.; He, W.; Fu, L.; Ma, X. L.	The Efficacy of Liposomal Bupivacaine Using Periarticular Injection in Total Knee Arthroplasty: A Systematic Review and Meta-Analysis	2017	References Reviewed
Seanglelur, A.; Vanasbodeekul, P.; Prapaitrakool, S.; Worathongchai, S.; Anothaisintawee, T.; McEvoy, M.; Vendittoli, P. A.; Attia, J.; Thakkinstian, A.	The efficacy of local infiltration analgesia in the early postoperative period after total knee arthroplasty: A systematic review and meta-analysis	2016	References Reviewed
Zhao, B.; Ma, X.; Zhang, J.; Ma, J.; Cao, Q.	The efficacy of local liposomal bupivacaine infiltration on pain and recovery after Total Joint Arthroplasty: A systematic review and meta-analysis of randomized controlled trials	2019	References Reviewed
Chang, F. L.; Ho, S. T.; Sheen, M. J.	Efficacy of mirtazapine in preventing intrathecal morphine-induced nausea and vomiting after orthopaedic surgery*	2010	work group exclusion;

Thieme, H.; Morkisch, N.; Rietz, C.; Dohle, C.; Borgetto, B.	The Efficacy of Movement Representation Techniques for Treatment of Limb Pain--A Systematic Review and Meta-Analysis	2016	References Reviewed
Kelley, T. C.; Adams, M. J.; Mulliken, B. D.; Dalury, D. F.	Efficacy of multimodal perioperative analgesia protocol with periarticular medication injection in total knee arthroplasty: a randomized, double-blinded study	2013	work group exclusion; not comparison of interest
Wang, Y.; Gao, F.; Sun, W.; Wang, B.; Guo, W.; Li, Z.	The efficacy of periarticular drug infiltration for postoperative pain after total hip arthroplasty: A systematic review and meta-analysis	2017	References Reviewed
Jiang, J.; Teng, Y.; Fan, Z.; Khan, M. S.; Cui, Z.; Xia, Y.	The efficacy of periarticular multimodal drug injection for postoperative pain management in total knee or hip arthroplasty	2013	References Reviewed
Gatewood, C. T.; Tran, A. A.; Dragoo, J. L.	The efficacy of post-operative devices following knee arthroscopic surgery: a systematic review	2017	References Reviewed
Li, F.; Ma, J.; Kuang, M.; Jiang, X.; Wang, Y.; Lu, B.; Zhao, X.; Sun, L.; Ma, X.	The efficacy of pregabalin for the management of postoperative pain in primary total knee and hip arthroplasty: a meta-analysis	2017	References Reviewed
Mao, Y.; Wu, L.; Ding, W.	The efficacy of preoperative administration of gabapentin/pregabalin in improving pain after total hip arthroplasty: a meta-analysis	2016	References Reviewed
Wang, Q.; Yue, Y.; Li, D.; Yang, Z.; Yeersheng, R.; Kang, P.	Efficacy of Single-Shot Adductor Canal Block Combined With Posterior Capsular Infiltration on Postoperative Pain and Functional Outcome After Total Knee Arthroplasty: A Prospective, Double-Blind, Randomized Controlled Study	2019	irrelevant comparison; block and local vs different local
Cui, Z.; Liu, X.; Teng, Y.; Jiang, J.; Wang, J.; Xia, Y.	The efficacy of steroid injection in total knee or hip arthroplasty	2015	References Reviewed
Coory, J. A.; Parr, A. F.; Wilkinson, M. P.; Gupta, A.	Efficacy of suprascapular nerve block compared with subacromial injection: a randomized controlled trial in patients with rotator cuff tears	2019	irrelevant topic; non-surgical treatment
Blasco, J. M.; Igual-Camacho, C.; Blasco, M. C.; Anton-Anton, V.; Ortiz-Llueca, A.; Roig-Casasus, S.	The efficacy of virtual reality tools for total knee replacement rehabilitation: A systematic review	2019	References Reviewed
Meng, J.; Li, L.	The efficiency and safety of dexamethasone for pain control in total joint arthroplasty: A meta-analysis of randomized controlled trials	2017	References Reviewed
Zhang, P.; Li, J.; Song, Y.; Wang, X.	The efficiency and safety of fascia iliaca block for pain control after total joint arthroplasty: A meta-analysis	2017	References Reviewed
Zhang, X.; Yang, Q.; Zhang, Z.	The efficiency and safety of local liposomal bupivacaine infiltration for pain control in total hip arthroplasty: A systematic review and meta-analysis	2017	References Reviewed

Liang, L.; Cai, Y.; Li, A.; Ma, C.	The efficiency of intravenous acetaminophen for pain control following total knee and hip arthroplasty: A systematic review and meta-analysis	2017	References Reviewed
Wu, J. W.; Wong, Y. C.	Elective unilateral total knee replacement using continuous femoral nerve blockade versus conventional patient-controlled analgesia: perioperative patient management based on a multidisciplinary pathway	2014	irrelevant comparison: block vs PCA opioid
Mollon, B.; da Silva, V.; Busse, J. W.; Einhorn, T. A.; Bhandari, M.	Electrical stimulation for long-bone fracture-healing: a meta-analysis of randomized controlled trials	2008	References Reviewed
Snyder-Mackler, L.; Ladin, Z.; Schepesis, A. A.; Young, J. C.	Electrical stimulation of the thigh muscles after reconstruction of the anterior cruciate ligament. Effects of electrically elicited contraction of the quadriceps femoris and hamstring muscles on gait and on strength of the thigh muscles	1991	<60 total pts
Lin, X.; Zhou, Y.; Zheng, H.; Zhang, J.; Wang, X.; Liu, K.; Wang, J.; Guo, X.; Li, Z.; Han, B.	Enhanced preoperative education about continuous femoral nerve block with patient-controlled analgesia improves the analgesic effect for patients undergoing total knee arthroplasty and reduces the workload for ward nurses	2019	irrelevant topic; pre-admission education
Koo, K. I.; Park, D. K.; Youm, Y. S.; Cho, S. D.; Hwang, C. H.	Enhanced Reality Showing Long-Lasting Analgesia after Total Knee Arthroplasty: Prospective, Randomized Clinical Trial	2018	irrelevant comparison; VR vs VR
Lundborg, G.; Bjorkman, A.; Rosen, B.	Enhanced sensory relearning after nerve repair by using repeated forearm anaesthesia: aspects on time dynamics of treatment	2007	<60 total pts
Choi, P. T.; Bhandari, M.; Scott, J.; Douketis, J.	Epidural analgesia for pain relief following hip or knee replacement	2003	References Reviewed
Chatrath, V.; Attri, J. P.; Bala, A.; Khetarpal, R.; Ahuja, D.; Kaur, S.	Epidural nalbuphine for postoperative analgesia in orthopedic surgery	2015	work group exclusion; not route of interest
Kasture, S.; Saraf, H.	Epidural versus intra-articular infusion analgesia following total knee replacement	2015	irrelevant topic; Non-RCT
Reuben, S. S.; Ekman, E. F.; Charron, D.	Evaluating the analgesic efficacy of administering celecoxib as a component of multimodal analgesia for outpatient anterior cruciate ligament reconstruction surgery	2007	Publication before 2010
Magan, A.; Golano, P.; Maffulli, N.; Khanduja, V.	Evaluation and management of injuries of the tibiofibular syndesmosis	2014	References reviewed
Lierz, P.; Losch, H.; Felleiter, P.	Evaluation of a single preoperative dose of etoricoxib for postoperative pain relief in therapeutic knee arthroscopy: a randomized trial	2012	work group exclusion; intervention not used in US

Rawal, N.; Viscusi, E.; Peloso, P. M.; Minkowitz, H. S.; Chen, L.; Shah, S.; Mehta, A.; Chitkara, D. K.; Curtis, S. P.; Papanicolaou, D. A.	Evaluation of etoricoxib in patients undergoing total knee replacement surgery in a double-blind, randomized controlled trial	2013	work group exclusion; intervention not used in US
Greene, K. A.; Wyman, A. M.; Scott, L. A.; Hart, S.; Hoyte, L.; Bassaly, R.	Evaluation of patient preparedness for surgery: a randomized controlled trial	2017	No outcomes of interest
Ververeli, P. A.; Leppy, E. B.; Tyler, C.; Fouad, C.	Evaluation of reducing postoperative hip precautions in total hip replacement: a randomized prospective study	2009	multimodal PT
Bistolfi, A.; Zanovello, J.; Ferracini, R.; Allisiardi, F.; Lioce, E.; Magistrone, E.; Berchiolla, P.; Da Rold, I.; Massazza, G.	Evaluation of the Effectiveness of Neuromuscular Electrical Stimulation After Total Knee Arthroplasty: A Meta-Analysis	2018	References reviewed
Lin, P. C.	An evaluation of the effectiveness of relaxation therapy for patients receiving joint replacement surgery	2012	non-rct
Vorobeichik, L.; Brull, R.; Joshi, G. P.; Abdallah, F. W.	Evidence Basis for Regional Anesthesia in Ambulatory Anterior Cruciate Ligament Reconstruction: Part I-Femoral Nerve Block	2019	References Reviewed
Yung, E. M.; Brull, R.; Albrecht, E.; Joshi, G. P.; Abdallah, F. W.	Evidence Basis for Regional Anesthesia in Ambulatory Anterior Cruciate Ligament Reconstruction: Part III: Local Instillation Analgesia-A Systematic Review and Meta-analysis	2019	References Reviewed
Halbert, J.; Crotty, M.; Cameron, I. D.	Evidence for the optimal management of acute and chronic phantom pain: a systematic review	2002	References Reviewed
van Grinsven, S.; van Cingel, R. E.; Holla, C. J.; van Loon, C. J.	Evidence-based rehabilitation following anterior cruciate ligament reconstruction	2010	References Reviewed
Mak, J. C.; Fransen, M.; Jennings, M.; March, L.; Mittal, R.; Harris, I. A.	Evidence-based review for patients undergoing elective hip and knee replacement	2014	References Reviewed
Kay, J.; de Sa, D.; Memon, M.; Simunovic, N.; Paul, J.; Ayeni, O. R.	Examining the Role of Perioperative Nerve Blocks in Hip Arthroscopy: A Systematic Review	2016	References Reviewed
Hah, J. M.; Cramer, E.; Hilmoe, H.; Schmidt, P.; McCue, R.; Trafton, J.; Clay, D.; Sharifzadeh, Y.; Ruchelli, G.; Goodman, S.; Huddleston, J.; Maloney, W. J.; Dirbas, F. M.; Shrager, J.; Costouros, J. G.; Curtin, C.; Mackey, S. C.; Carroll, I.	Factors Associated With Acute Pain Estimation, Postoperative Pain Resolution, Opioid Cessation, and Recovery: Secondary Analysis of a Randomized Clinical Trial	2019	Irrelevant comparison; preop vs postop gabapentin

Mouzopoulos, G.; Vasiliadis, G.; Lasanianos, N.; Nikolaras, G.; Morakis, E.; Kaminaris, M.	Fascia iliaca block prophylaxis for hip fracture patients at risk for delirium: a randomized placebo-controlled study	2009	irrelevant comparison; block vs placebo
Peng, P.; Claxton, A.; Chung, F.; Chan, V.; Miniaci, A.; Krishnathas, A.	Femoral nerve block and ketorolac in patients undergoing anterior cruciate ligament reconstruction	1999	published before 2010
Mutty, C. E.; Jensen, E. J.; Manka, M. A., Jr.; Anders, M. J.; Bone, L. B.	Femoral nerve block for diaphyseal and distal femoral fractures in the emergency department. Surgical technique	2008	surgical technique explained
Paul, J. E.; Arya, A.; Hurlburt, L.; Cheng, J.; Thabane, L.; Tidy, A.; Murthy, Y.	Femoral nerve block improves analgesia outcomes after total knee arthroplasty: a meta-analysis of randomized controlled trials	2010	References Reviewed
Rowlands, M.; Walt, G. V.; Bradley, J.; Mannings, A.; Armstrong, S.; Bedford, N.; Moppett, I. K.; Sahota, O.	Femoral Nerve Block Intervention in Neck of Femur Fracture (FINOF): a randomised controlled trial	2018	irrelevant comparison; block vs control
Mulroy, M. F.; Larkin, K. L.; Batra, M. S.; Hodgson, P. S.; Owens, B. D.	Femoral nerve block with 0.25% or 0.5% bupivacaine improves postoperative analgesia following outpatient arthroscopic anterior cruciate ligament repair	2001	irrelevant comparison: sham vs block
Chan, E. Y.; Fransen, M.; Parker, D. A.; Assam, P. N.; Chua, N.	Femoral nerve blocks for acute postoperative pain after knee replacement surgery	2014	references Reviewed
C. Wyatt M; Wright, T.; Locker, J.; Stout, K.; Chapple, C.; Theis, J. C.	Femoral nerve infusion after primary total knee arthroplasty: a prospective, double-blind, randomised and placebo-controlled trial	2015	irrelevant comparison: nerve infusion vs placebo
Volpato, H. B.; Szego, P.; Lenza, M.; Milan, S. L.; Talerman, C.; Ferretti, M.	Femoral quadriceps neuromuscular electrical stimulation after total knee arthroplasty: a systematic review	2016	References Reviewed
Stav, A.; Reytman, L.; Sevi, R.; Stav, M. Y.; Powell, D.; Dor, Y.; Dudkiewicz, M.; Bayadse, F.; Sternberg, A.; Soudry, M.	Femoral versus Multiple Nerve Blocks for Analgesia after Total Knee Arthroplasty	2017	irrelevant comparison: FNB vs multiple NB vs control
Pethe-Kania, K.; Opara, J. A.; Kania, D.; Kidon, Z.; Lukaszewicz, T.	The follow-up posturography in rehabilitation after total hip arthroplasty	2017	Irrelevant comparison; posturography (body posture symmetry) vs PT

Hadzic, A.; Williams, B. A.; Karaca, P. E.; Hobeika, P.; Unis, G.; Dermksian, J.; Yufa, M.; Thys, D. M.; Santos, A. C.	For outpatient rotator cuff surgery, nerve block anesthesia provides superior same-day recovery over general anesthesia	2005	irrelevant comparison: block vs GA
Tseng, M. Y.; Shyu, Y. I.; Liang, J.	Functional recovery of older hip-fracture patients after interdisciplinary intervention follows three distinct trajectories	2012	irrelevant topic; multimodal geriatric intervention
Groetelaers, R. P.; Janssen, L.; van der Velden, J.; Wieland, A. W.; Amendt, A. G.; Geelen, P. H.; Janzing, H. M.	Functional Treatment or Cast Immobilization After Minimally Invasive Repair of an Acute Achilles Tendon Rupture: Prospective, Randomized Trial	2014	<60 total pts
Eloy, J. D.; Anthony, C.; Amin, S.; Caparo, M.; Reilly, M. C.; Shulman, S.	Gabapentin Does Not Appear to Improve Postoperative Pain and Sleep Patterns in Patients Who Concomitantly Receive Regional Anesthesia for Lower Extremity Orthopedic Surgery: A Randomized Control Trial	2017	< 60 total pts
Khetarpal, R.; Kataria, A. P.; Bajaj, S.; Kaur, H.; Singh, S.	Gabapentin vs pregabalin as a premedication in lower limb orthopaedics surgery under combined spinal epidural technique	2016	Exclude
Umberger, W.; Draucker, C. B.; Jacobson, A.	Guided Imagery for Total Knee Replacement: Responses to an Audiobook Placebo Treatment	2019	No outcomes of interest
Cosic, F.; Kimmel, L.; Edwards, E.	Health Literacy in Orthopaedic Trauma Patients	2017	No outcomes of interest
Myderrizi, N.; Mema, B.	The hematoma block an effective alternative for fracture reduction in distal radius fractures	2011	irrelevant comparison: block vs GA
Karlsen, A. P.; Mathiesen, O.; Dahl, J. B.	Heterogenic control groups in randomized, controlled, analgesic trials of total hip and knee arthroplasty	2018	References Reviewed
O'Malley, N. T.; Blauth, M.; Suhm, N.; Kates, S. L.	Hip fracture management, before and beyond surgery and medication: a synthesis of the evidence	2011	References Reviewed
Ilfeld, B. M.; Mariano, E. R.; Williams, B. A.; Woodard, J. N.; Macario, A.	Hospitalization costs of total knee arthroplasty with a continuous femoral nerve block provided only in the hospital versus on an ambulatory basis: a retrospective, case-control, cost-minimization analysis	2007	irrelevant comparison; inpatient vs outpatient surgery
McDonald, E. L.; Daniel, J. N.; Rogero, R. G.; Shakked, R. J.; Nicholson, K.; Pedowitz, D. I.; Raikin, S. M.; Bilolikar, V.; Winters, B. S.	How Does Perioperative Ketorolac Effect Opioid Consumption and Pain Management After Ankle Fracture Surgery?	2019	work group exclusion; not comparison of interest



Mazari, F. A.; Mockford, K.; Barnett, C.; Khan, J. A.; Brown, B.; Smith, L.; Polman, R. C.; Hancock, A.; Vanicek, N. K.; Chetter, I. C.	Hull early walking aid for rehabilitation of transtibial amputees-- randomized controlled trial (HEART)	2010	irrelevant topic; vascular patients & early walking aids
Vorsanger, G. J.; Klopfer, A. M.; Xiang, J.; Benson, C. J.; Moskovitz, B. L.; Rosenthal, N. R.	Immediate-release tapentadol or oxycodone for treatment of acute postoperative pain after elective arthroscopic shoulder surgery: a randomized, phase IIIb study	2013	work group exclusion; not comparison of interest
de Achaval, S.; Fraenkel, L.; Volk, R. J.; Cox, V.; Suarez-Almazor, M. E.	Impact of educational and patient decision aids on decisional conflict associated with total knee arthroplasty	2012	irrelevant topic; decision aid for surgery
Raiff, D.; Vaughan, C.; McGee, A.	Impact of intraoperative acetaminophen administration on postoperative opioid consumption in patients undergoing hip or knee replacement	2014	irrelevant topic; Non-RCT
McCarthy, G. C.; Megalla, S. A.; Habib, A. S.	Impact of intravenous lidocaine infusion on postoperative analgesia and recovery from surgery: a systematic review of randomized controlled trials	2010	References Reviewed
Goldstein, R. Y.; Park, J. H.; Jain, S.; Tejwani, N.	The Impact of Popliteal Block on Postoperative Medication Administration and Time to Discharge from the Post-Anesthesia Care Unit	2015	irrelevant comparison: popliteal block vs GA
Caforio, M.; Maniscalco, P.	The importance of early rehabilitation in proximal humeral fracture: A clinical trial of efficacy and safety of a new endomedullary nail	2017	non-RCT, multimodal PT
Castillo, R. C.; Raja, S. N.; Frey, K. P.; Vallier, H. A.; Tornetta, P., 3rd; Jaebalon, T.; Goff, B. J.; Gottschalk, A.; Scharfstein, D. O.; O'Toole, R. V.	Improving Pain Management and Long-Term Outcomes Following High-Energy Orthopaedic Trauma (Pain Study)	2017	protocol
McCarthy, D. M.; Wolf, M. S.; McConnell, R.; Sears, J.; Chevrier, A.; Ahlstrom, E.; Engel, K. G.; Cameron, K. A.; Adams, J. G.; Courtney, D. M.	Improving patient knowledge and safe use of opioids: a randomized controlled trial	2015	mixed population; 26% back injury, 24% other
van Beek, R.; Zonneveldt, H. J.; van der Ploeg, T.; Steens, J.; Lirk, P.; Hollmann, M. W.	In patients undergoing fast track total knee arthroplasty, addition of buprenorphine to a femoral nerve block has no clinical advantage: A prospective, double-blinded, randomized, placebo controlled trial	2017	irrelevant comparison; block vs control
Lebon, F.; Guillot, A.; Collet, C.	Increased muscle activation following motor imagery during the rehabilitation of the anterior cruciate ligament	2012	<60 Pts total
Sagi, H. C.; Jordan, C. J.; Barei, D. P.; Serrano-Riera, R.; Steverson, B.	Indomethacin prophylaxis for heterotopic ossification after acetabular fracture surgery increases the risk for nonunion of the posterior wall	2014	< 30 per target group

Zywiell, M. G.; Prabhu, A.; Perruccio, A. V.; Gandhi, R.	The influence of anesthesia and pain management on cognitive dysfunction after joint arthroplasty: a systematic review	2014	References Reviewed
Tzimas, P.; Samara, E.; Petrou, A.; Korompilias, A.; Chalkias, A.; Papadopoulos, G.	The influence of anesthetic techniques on postoperative cognitive function in elderly patients undergoing hip fracture surgery: General vs spinal anesthesia	2018	irrelevant comparison: GA vs SA
Aris, A.; Sulaiman, S.; Che Hasan, M. K.	The influence of music therapy on mental well-being among postoperative patients of total knee arthroplasty (TKA)	2019	<60 Pts total
Kjaer Petersen, K.; Lunn, T. H.; Husted, H.; Hansen, L. T.; Simonsen, O.; Laursen, M. B.; Kehlet, H.; Arendt-Nielsen, L.	The influence of pre- and perioperative administration of gabapentin on pain 3-4 years after total knee arthroplasty	2018	work group exclusion;
Korhonen, A. M.; Valanne, J. V.; Jokela, R. M.; Ravaska, P.; Volmanen, P.; Korttila, K.	Influence of the injection site (L2/3 or L3/4) and the posture of the vertebral column on selective spinal anesthesia for ambulatory knee arthroscopy	2005	irrelevant comparison: different injection sites
Abdul-Wahab, T. A.; Betancourt, J. P.; Hassan, F.; Thani, S. A.; Choueiri, H.; Jain, N. B.; Malanga, G. A.; Murrell, W. D.; Prasad, A.; Verborgt, O.	Initial treatment of complete rotator cuff tear and transition to surgical treatment: systematic review of the evidence	2016	References Reviewed
Soltesz, S.; Meiger, D.; Milles-Thieme, S.; Saxler, G.; Ziegeler, S.	Intermittent versus continuous sciatic block combined with femoral block for patients undergoing knee arthroplasty. A randomized controlled trial	2016	irrelevant comparison; block vs block
Hughes, M. S.; Matava, M. J.; Wright, R. W.; Brophy, R. H.; Smith, M. V.	Interscalene brachial plexus block for arthroscopic shoulder surgery: a systematic review	2013	References Reviewed
Lehmann, L. J.; Loosen, G.; Weiss, C.; Schmittner, M. D.	Interscalene plexus block versus general anaesthesia for shoulder surgery: a randomized controlled study	2015	irrelevant comparison: block vs GA
Winkler, T.; Suda, A. J.; Dumitrescu, R. V.; Pinggera, O.; Weber, G.; Loho, G.; Schneider, B.; Wurnig, C.	Interscalene versus subacromial continuous infusion of ropivacaine after arthroscopic acromioplasty: a randomized controlled trial	2009	irrelevant comparison: regional vs regional
Handoll, H. H.; Sherrington, C.; Mak, J. C.	Interventions for improving mobility after hip fracture surgery in adults	2011	References Reviewed
Handoll, H. H.; Brorson, S.	Interventions for treating proximal humeral fractures in adults	2015	References Reviewed
Reinhardt, K. R.; Duggal, S.; Umunna, B. P.; Reinhardt, G. A.	Intraarticular analgesia versus epidural plus femoral nerve block after TKA: a randomized, double-blind trial	2014	irrelevant comparison; local infusion vs block

Nam, D.; Alexiades, M.; Cornell, C. N.			
Danieli, M. V.; Cavazzani Neto, A.; Herrera, P. A.	Intra-articular bupivacaine or bupivacaine and morphine after ACL reconstruction	2012	< 60 total pts
Arai, Y. C.; Ikeuchi, M.; Fukunaga, K.; Ueda, W.; Kimura, T.; Komatsu, T.	Intra-articular injection of warmed lidocaine improves intraoperative anaesthetic and postoperative analgesic conditions	2006	irrelevant comparison; warmed local anesthetic vs control
Townshend, D.; Emmerson, K.; Jones, S.; Partington, P.; Muller, S.	Intra-articular injection versus portal infiltration of 0.5% bupivacaine following arthroscopy of the knee: a prospective, randomised double-blinded trial	2009	irrelevant comparison: local vs local
Kazak Bengisun, Z.; Aysu Salviz, E.; Darcin, K.; Suer, H.; Ates, Y.	Intraarticular levobupivacaine or bupivacaine administration decreases pain scores and provides a better recovery after total knee arthroplasty	2010	irrelevant comparison: intra-articular bupivacaine vs levobupivacaine vs control
Weston-Simons, J. S.; Pandit, H.; Haliker, V.; Dodd, C. A.; Popat, M. T.; Murray, D. W.	Intra-articular local anaesthetic on the day after surgery improves pain and patient satisfaction after Unicompartmental Knee Replacement: a randomised controlled trial	2012	irrelevant comparison; local vs placebo
Senthilkumaran, S.; Tate, R.; Read, J. R.; Sutherland, A. G.	Intra-articular morphine and bupivacaine for post-operative analgesia in anterior cruciate ligament reconstruction: a prospective randomised controlled trial	2010	irrelevant comparison; opioid vs control
Reuben, S. S.; Steinberg, R. B.; Cohen, M. A.; Kilaru, P. A.; Gibson, C. S.	Intraarticular morphine in the multimodal analgesic management of postoperative pain after ambulatory anterior cruciate ligament repair	1998	Publication before 2010
Elkousy, H.; Kannan, V.; Calder, C. T.; Zumwalt, J.; O'Connor, D. P.; Woods, G. W.	Intra-articular morphine versus bupivacaine for postoperative pain management	2013	Irrelevant comparison; opioid vs anesthetic (bupivacaine)
Zeidan, A.; Kassem, R.; Nahleh, N.; Maaliki, H.; El-Khatib, M.; Struys, M. M.; Baraka, A.	Intraarticular tramadol-bupivacaine combination prolongs the duration of postoperative analgesia after outpatient arthroscopic knee surgery	2008	published before 2010
	Intra-articular viscosupplementation with hylan g-f 20 to treat osteoarthritis of the knee: an evidence-based analysis	2005	References Reviewed
Lunn, T. H.; Husted, H.; Solgaard, S.; Kristensen, B. B.; Otte, K. S.; Kjersgaard, A. G.; Gaarn-Larsen, L.; Kehlet, H.	Intraoperative local infiltration analgesia for early analgesia after total hip arthroplasty: a randomized, double-blind, placebo-controlled trial	2011	irrelevant comparison: local infiltration vs placebo

Salazar, F.; Donate, M.; Boget, T.; Bogdanovich, A.; Basora, M.; Torres, F.; Fabregas, N.	Intraoperative warming and post-operative cognitive dysfunction after total knee replacement	2011	Irrelevant outcome: only postop cognitive dysfunction
Han, C. D.; Lee, D. H.; Yang, I. H.	Intra-synovial ropivacaine and morphine for pain relief after total knee arthroplasty: a prospective, randomized, double blind study	2007	published before 2010
Kligman, M.; Bruskin, A.; Sckliamser, J.; Vered, R.; Roffman, M.	Intra-synovial, compared to intra-articular morphine provides better pain relief following knee arthroscopy meniscectomy	2002	published before 2010
Sanders, J. C.; Gerstein, N.; Torgeson, E.; Abram, S.	Intrathecal baclofen for postoperative analgesia after total knee arthroplasty	2009	work group exclusion; not route of interest
Tan, P. H.; Chia, Y. Y.; Lo, Y.; Liu, K.; Yang, L. C.; Lee, T. H.	Intrathecal bupivacaine with morphine or neostigmine for postoperative analgesia after total knee replacement surgery	2001	< 30 per target group
Aguirre, J.; Borgeat, A.; Buhler, P.; Mrdjen, J.; Hardmeier, B.; Bonvini, J. M.	Intrathecal hyperbaric 2% prilocaine versus 0.4% plain ropivacaine for same-day arthroscopic knee surgery: a prospective randomized double-blind controlled study	2015	irrelevant comparison: epidural vs epidural
Wang, L.; Bauer, M.; Curry, R.; Larsson, A.; Sessler, D. I.; Eisenach, J. C.	Intrathecal ketorolac does not improve acute or chronic pain after hip arthroplasty: a randomized controlled trial	2014	< 30 per target group
Laurettil, G. R.; Righeti, C. C.; Mattos, A. L.	Intrathecal ketorolac enhances intrathecal morphine analgesia following total knee arthroplasty	2013	< 30 per target group
Safavi, M.; Honarmand, A.; Rahmanikhah, E.; Badiei, S.; Attari, M.	Intrathecal Meperidine versus intrathecal Fentanyl for prevention of shivering in lower limb orthopedic surgeries under spinal anesthesia: A randomized double-blind placebo-controlled trial	2014	work group exclusion; not focusing on pain relief
Mukherjee, A.; Pal, A.; Agrawal, J.; Mehrotra, A.; Dawar, N.	Intrathecal nalbuphine as an adjuvant to subarachnoid block: What is the most effective dose?	2011	< 30 per target group
McNamee, D. A.; Parks, L.; McClelland, A. M.; Scott, S.; Milligan, K. R.; Ahlen, K.; Gustafsson, U.	Intrathecal ropivacaine for total hip arthroplasty: double-blind comparative study with isobaric 7.5 mg ml <sup>-1</sup> and 10 mg ml <sup>-1</sup> solutions	2001	irrelevant comparison: 7.5 mg vs 10 mg/ml ropivacaine
Salhotra, R.; Mohta, M.; Agarwal, D.; Sethi, A. K.	Intrathecal ropivacaine with or without tramadol for lower limb orthopedic surgeries	2016	< 30 per target group
Fournier, R.; Weber, A.; Gamulin, Z.	Intrathecal sufentanil is more potent than intravenous for postoperative analgesia after total-hip replacement	2005	irrelevant comparison; intrathecal vs IV
Motiani, P.; Chaudhary, S.; Bahl, N.; Sethi, A. K.	Intrathecal sufentanil versus fentanyl for lower limb surgeries - a randomized controlled trial	2010	work group exclusion; not route of interest

Gupta, P.; Gupta, M.	Intrathecal Tramadol for Prevention of Postanesthesia Shivering after Subarachnoid Block: A Prospective Randomized Placebo-Controlled Comparison of Two Different Doses (10 and 20 mg)	2018	irrelevant comparison: different doses
Yang, L.; Du, S.; Sun, Y.	Intravenous acetaminophen as an adjunct to multimodal analgesia after total knee and hip arthroplasty: A systematic review and meta-analysis	2017	References Reviewed
Singh, A. P.; Kohli, V.; Bajwa, S. J.	Intravenous analgesia with opioids versus femoral nerve block with 0.2% ropivacaine as preemptive analgesic for fracture femur: A randomized comparative study	2016	irrelevant comparison; block vs iv
Song, S. Y.; Son, S. H.; Kim, S. O.; Roh, W. S.	Intravenous fentanyl during shoulder arthroscopic surgery in the sitting position after interscalene block increases the incidence of episodes of bradycardia hypotension	2011	work group exclusion; no outcome of interest
Gago Martinez, A.; Escontrela Rodriguez, B.; Planas Roca, A.; Martinez Ruiz, A.	Intravenous Ibuprofen for Treatment of Post-Operative Pain: A Multicenter, Double Blind, Placebo-Controlled, Randomized Clinical Trial	2016	< 30 per target group
Hashemi, S. M.; Esmaelijah, A.; Golzari, S.; Keyhani, S.; Maserrat, A.; Mohseni, G.; Ardehali, S. H.	Intravenous Paracetamol Versus Patient-Controlled Analgesia With Morphine for the Pain Management Following Diagnostic Knee Arthroscopy in Trauma Patients: A Randomized Clinical Trial	2015	work group exclude; no opioid
Sarridou, D. G.; Chalmouki, G.; Braoudaki, M.; Koutsoupaki, A.; Mela, A.; Vadalouka, A.	Intravenous parecoxib and continuous femoral block for postoperative analgesia after total knee arthroplasty. A randomized, double-blind, prospective trial	2015	work group exclusion; intervention not used in US
Rasmussen, G. L.; Steckner, K.; Hogue, C.; Torri, S.; Hubbard, R. C.	Intravenous parecoxib sodium for acute pain after orthopedic knee surgery	2002	published before 2010
O'Neal, J. B.; Freiberg, A. A.; Yelle, M. D.; Jiang, Y.; Zhang, C.; Gu, Y.; Kong, X.; Jian, W.; O'Neal, W. T.; Wang, J.	Intravenous vs Oral Acetaminophen as an Adjunct to Multimodal Analgesia After Total Knee Arthroplasty: A Prospective, Randomized, Double-Blind Clinical Trial	2017	work group exclusion; confounded measurements
Moretti, B.; Notarnicola, A.; Moretti, L.; Setti, S.; De Terlizzi, F.; Pesce, V.; Patella, V.	I-ONE therapy in patients undergoing total knee arthroplasty: a prospective, randomized and controlled study	2012	<60 total pts
Kuyucu, E.; Bulbul, M.; Kara, A.; Kocyigit, F.; Erdil, M.	Is cold therapy really efficient after knee arthroplasty?	2015	<30 pts per group
Widmer, B. J.; Scholes, C. J.; Pattullo, G. G.; Oussedik, S. I.; Parker, D. A.; Coolican, M. R.	Is femoral nerve block necessary during total knee arthroplasty?: a randomized controlled trial	2012	irrelevant comparison; block vs control

Mardani-Kivi, M.; Mobarakeh, M. K.; Keyhani, S.; Motlagh, K. H.; Ekhtiari, K. S.	Is gabapentin effective on pain management after arthroscopic anterior cruciate ligament reconstruction? A triple blinded randomized controlled trial	2013	work group exclusion; unclear
Thomas, K. M.; Sethares, K. A.	Is guided imagery effective in reducing pain and anxiety in the postoperative total joint arthroplasty patient?	2010	non-rct
Joo, J. H.; Park, J. W.; Kim, J. S.; Kim, Y. H.	Is intra-articular multimodal drug injection effective in pain management after total knee arthroplasty? A randomized, double-blinded, prospective study	2011	irrelevant comparison; local vs placebo
Lee, S. K.; Lee, J. W.; Choy, W. S.	Is multimodal analgesia as effective as postoperative patient-controlled analgesia following upper extremity surgery?	2013	irrelevant comparison: multimodal Vs i.v PCA
Han, C.; Kuang, M. J.; Ma, J. X.; Ma, X. L.	Is pregabalin effective and safe in total knee arthroplasty? A PRISMA-compliant meta-analysis of randomized-controlled trials	2017	References Reviewed
Munteanu, A. M.; Cionac Florescu, S.; Anastase, D. M.; Stoica, C. I.	Is there any analgesic benefit from preoperative vs. postoperative administration of etoricoxib in total knee arthroplasty under spinal anaesthesia?: A randomised double-blind placebo-controlled trial	2016	work group exclusion; intervention not used in US
Gumaa, M.; Rehan Youssef, A.	Is Virtual Reality Effective in Orthopedic Rehabilitation? A Systematic Review and Meta-Analysis	2019	References Reviewed
Sorensen, J. K.; Jaeger, P.; Dahl, J. B.; Gottschau, B.; Stephensen, S. L.; Grevstad, U.	The Isolated Effect of Adductor Canal Block on Quadriceps Femoris Muscle Strength After Total Knee Arthroplasty: A Triple-Blinded, Randomized, Placebo-Controlled Trial with Individual Patient Analysis	2016	irrelevant comparison: block vs block
Slappendel, R.; Weber, E. W.; Benraad, B.; van Limbeek, J.; Dirksen, R.	Itching after intrathecal morphine. Incidence and treatment	2000	published before 2010
Singla, N. K.; Hale, M. E.; Davis, J. C.; Bekker, A.; Gimbel, J.; Jahr, J.; Royal, M. A.; Ang, R. Y.; Viscusi, E. R.	IV acetaminophen: Efficacy of a single dose for postoperative pain after hip arthroplasty: subset data analysis of 2 unpublished randomized clinical trials	2015	confounded treatment
Zhang, J.; Shi, K.; Jia, H.	Ketamine and bupivacaine attenuate post-operative pain following total knee arthroplasty: A randomized clinical trial	2018	<30 pts per group
Li, Z.; Chen, Y.	Ketamine reduces pain and opioid consumption after total knee arthroplasty: A meta-analysis of randomized controlled studies	2019	References Reviewed
Forssblad, M.; Jacobson, E.; Weidenhielm, L.	Knee arthroscopy with different anesthesia methods: a comparison of efficacy and cost	2004	work group exclusion; not focusing on pain relief

Jacobson, E.; Forssblad, M.; Weidenhielm, L.; Renstrom, P.	Knee arthroscopy with the use of local anesthesia--an increased risk for repeat arthroscopy? A prospective, randomized study with a six-month follow-up	2002	repeat of 10123
Fournier, R.; Faust, A.; Chassot, O.; Gamulin, Z.	Levobupivacaine 0.5% provides longer analgesia after sciatic nerve block using the Labat approach than the same dose of ropivacaine in foot and ankle surgery	2010	irrelevant comparison: levobupivacaine vs ropivacaine
Koch, T.; Fichtner, A.; Schwemmer, U.; Standl, T.; Volk, T.; Engelhard, K.; Stevens, M. F.; Putzke, C.; Scholz, J.; Zenz, M.; Motsch, J.; Hempel, V.; Heinrichs, A.; Zwissler, B.	Levobupivacaine for epidural anaesthesia and postoperative analgesia in hip surgery: a multi-center efficacy and safety equivalence study with bupivacaine and ropivacaine	2008	Irrelevant comparison; preop vs postop anesthetics
Piangatelli, C.; De Angelis, C.; Pecora, L.; Recanatini, F.; Testasecca, D.	Levobupivacaine versus ropivacaine in psoas compartment block and sciatic nerve block in orthopedic surgery of the lower extremity	2004	irrelevant comparison; block vs block
Casati, A.; Vinciguerra, F.; Scarioni, M.; Cappelleri, G.; Aldegheri, G.; Manzoni, P.; Fraschini, G.; Chelly, J. E.	Lidocaine versus ropivacaine for continuous interscalene brachial plexus block after open shoulder surgery	2003	irrelevant comparison; block vs block
Ma, J.; Zhang, W.; Yao, S.	Liposomal bupivacaine infiltration versus femoral nerve block for pain control in total knee arthroplasty: A systematic review and meta-analysis	2016	References Reviewed
Yan, Z.; Chen, Z.; Ma, C.	Liposomal bupivacaine versus interscalene nerve block for pain control after shoulder arthroplasty: A meta-analysis	2017	References Reviewed
Wang, K.; Zhang, H. X.	Liposomal bupivacaine versus interscalene nerve block for pain control after total shoulder arthroplasty: A systematic review and meta-analysis	2017	References Reviewed
Marques, E. M.; Jones, H. E.; Elvers, K. T.; Pyke, M.; Blom, A. W.; Beswick, A. D.	Local anaesthetic infiltration for peri-operative pain control in total hip and knee replacement: systematic review and meta-analyses of short- and long-term effectiveness	2014	References Reviewed
Marques, E. M.; Blom, A. W.; Lenguerrand, E.; Wylde, V.; Noble, S. M.	Local anaesthetic wound infiltration in addition to standard anaesthetic regimen in total hip and knee replacement: long-term cost-effectiveness analyses alongside the APEX randomised controlled trials	2015	irrelevant comparison; block vs control
Andersen, K. V.; Nikolajsen, L.; Haraldsted, V.; Odgaard, A.; Soballe, K.	Local infiltration analgesia for total knee arthroplasty: should ketorolac be added?	2013	work group exclusion; irrelevant comparison

Affas, F.	Local infiltration analgesia in knee and hip arthroplasty efficacy and safety	2016	work group exclusion; mixed population, no stratified analysis
Yun, X. D.; Yin, X. L.; Jiang, J.; Teng, Y. J.; Dong, H. T.; An, L. P.; Xia, Y. Y.	Local infiltration analgesia versus femoral nerve block in total knee arthroplasty: a meta-analysis	2015	References Reviewed
Hu, B.; Lin, T.; Yan, S. G.; Tong, S. L.; Yu, J. H.; Xu, J. J.; Ying, Y. M.	Local Infiltration Analgesia Versus Regional Blockade for Postoperative Analgesia in Total Knee Arthroplasty: A Meta-analysis of Randomized Controlled Trials	2016	References Reviewed
Mont, M. A.; Beaver, W. B.; Dysart, S. H.; Barrington, J. W.; Del Gaizo, D. J.	Local Infiltration Analgesia With Liposomal Bupivacaine Improves Pain Scores and Reduces Opioid Use After Total Knee Arthroplasty: Results of a Randomized Controlled Trial	2018	irrelevant comparison: local infiltration with LB vs without LB
Li, C.; Qu, J.; Pan, S.; Qu, Y.	Local infiltration anesthesia versus epidural analgesia for postoperative pain control in total knee arthroplasty: a systematic review and meta-analysis	2018	References Reviewed
Musclow, S. L.; Bowers, T.; Vo, H.; Glube, M.; Nguyen, T.	Long-acting morphine following hip or knee replacement: a randomized, double-blind, placebo-controlled trial	2012	irrelevant comparison; opioid vs placebo
Pisters, M. F.; Veenhof, C.; Schellevis, F. G.; De Bakker, D. H.; Dekker, J.	Long-term effectiveness of exercise therapy in patients with osteoarthritis of the hip or knee: a randomized controlled trial comparing two different physical therapy interventions	2010	irrelevant topic; non-surgical treatment
Wegener, J. T.; van Ooij, B.; van Dijk, C. N.; Karayeva, S. A.; Hollmann, M. W.; Preckel, B.; Stevens, M. F.	Long-term pain and functional disability after total knee arthroplasty with and without single-injection or continuous sciatic nerve block in addition to continuous femoral nerve block: a prospective, 1-year follow-up of a randomized controlled trial	2013	irrelevant comparison; block vs block
Aksakal, M.; Ermutlu, C.; Ozkaya, G.; Ozkan, Y.	Lornoxicam injection is inferior to betamethasone in the treatment of subacromial impingement syndrome : A prospective randomized study of functional outcomes	2017	Irrelevant comparison; steroid vs NSAID
Azboy, I.; Groff, H.; Goswami, K.; Vahedian, M.; Parvizi, J.	Low-Dose Aspirin Is Adequate for Venous Thromboembolism Prevention Following Total Joint Arthroplasty: A Systematic Review	2019	References Reviewed
Riddell, J. M.; Trummel, J. M.; Onakpoya, I. J.	Low-dose ketamine in painful orthopaedic surgery: a systematic review and meta-analysis	2019	References Reviewed
YaDeau, J. T.; Tedore, T.; Goytizolo, E. A.; Kim, D. H.; Green, D. S.; Westrick, A.; Fan, R.; Rade, M. C.; Ranawat, A. S.; Coleman, S. H.; Kelly, B. T.	Lumbar plexus blockade reduces pain after hip arthroscopy: a prospective randomized controlled trial	2012	irrelevant comparison; block vs block



Guo, H.; Wang, C.; He, Y.	A meta-analysis evaluates the efficacy of intravenous acetaminophen for pain management in knee or hip arthroplasty	2018	References Reviewed
Hamilton, T. W.; Strickland, L. H.; Pandit, H. G.	A Meta-Analysis on the Use of Gabapentinoids for the Treatment of Acute Postoperative Pain Following Total Knee Arthroplasty	2016	References Reviewed
Neto, J. O.; Machado, M. D.; de Almeida Correa, M.; Scomparim, H. A.; Posso, I. P.; Ashmawi, H. A.	Methadone patient-controlled analgesia for postoperative pain: a randomized, controlled, double-blind study	2014	< 60 total pts
Pang, W.; Liu, Y. C.; Maboudou, E.; Chen, T. X.; Cho, J. M.; Liao, C. C.; Wu, R. S.	Metoclopramide improves the quality of tramadol PCA indistinguishable to morphine PCA: a prospective, randomized, double blind clinical comparison	2013	irrelevant comparison: tramadol + metoclopramide vs morphine
Chan, B. L.; Witt, R.; Charrow, A. P.; Magee, A.; Howard, R.; Pasquina, P. F.; Heilman, K. M.; Tsao, J. W.	Mirror therapy for phantom limb pain	2007	review
Handoll, H. H.; Parker, M. J.; Sherrington, C.	Mobilisation strategies after hip fracture surgery in adults	2003	References Reviewed
Schroer, W. C.; Diesfeld, P. J.; LeMarr, A. R.; Morton, D. J.; Reedy, M. E.	Modifiable Risk Factors in Primary Joint Arthroplasty Increase 90-Day Cost of Care	2018	no comparison of interest
Pasquali Ronchetti, I.; Guerra, D.; Taparelli, F.; Boraldi, F.; Bergamini, G.; Mori, G.; Zizzi, F.; Frizziero, L.	Morphological analysis of knee synovial membrane biopsies from a randomized controlled clinical study comparing the effects of sodium hyaluronate (Hyalgan) and methylprednisolone acetate (Depomedrol) in osteoarthritis	2001	irrelevant comparison: hyaluronan vs methylprednisolone acetate
Dorr, L. D.; Raya, J.; Long, W. T.; Boutary, M.; Sirianni, L. E.	Multimodal analgesia without parenteral narcotics for total knee arthroplasty	2008	irrelevant comparison; block vs block
Cho, C. H.; Song, K. S.; Min, B. W.; Lee, K. J.; Ha, E.; Lee, Y. C.; Lee, Y. K.	Multimodal approach to postoperative pain control in patients undergoing rotator cuff repair	2011	irrelevant comparison: multimodal Vs i.v PCA
Gong, Y.; Zhang, Y.; Tao, S.	Nalbuphine for analgesia after fracture surgery and its effect on circulating inflammatory factors	2018	work group exclusion; no outcome of interest
Schneider, J.; Broome, B.; Keeley, D.	Narcotic-Free Perioperative Total Knee Arthroplasty: Does the Periarticular Injection Medication Make a Difference?	2019	irrelevant comparison; local vs local anesthesia
Remerand, F.; Le Tendre, C.; Rosset, P.; Peru, R.; Favard, L.; Pourrat, X.; Laffon, M.; Fusciardi, J.	Nefopam after total hip arthroplasty: role in multimodal analgesia	2013	irrelevant topic; Non-RCT

Biau, D. J.; Porcher, R.; Roren, A.; Babinet, A.; Rosencher, N.; Chevret, S.; Poiraudeau, S.; Anract, P.	Neither pre-operative education or a minimally invasive procedure have any influence on the recovery time after total hip replacement	2015	irrelevant comparison: patient education or no education
Labanca, L.; Rocchi, J. E.; Laudani, L.; Guitaldi, R.; Virgulti, A.; Mariani, P. P.; Macaluso, A.	Neuromuscular Electrical Stimulation Superimposed on Movement Early after ACL Surgery	2018	<30 pts per group
Barrington, J. W.; Emerson, R. H.; Lovald, S. T.; Lombardi, A. V.; Berend, K. R.	No Difference in Early Analgesia Between Liposomal Bupivacaine Injection and Intrathecal Morphine After TKA	2017	irrelevant comparison: block vs block vs block
den Hartog, Y. M.; Mathijssen, N. M.; van Dasselaar, N. T.; Langendijk, P. N.; Vehmeijer, S. B.	No effect of the infiltration of local anaesthetic for total hip arthroplasty using an anterior approach: a randomised placebo controlled trial	2015	Irrelevant comparison; local vs local vs placebo anesthesia
Aliuskevicius, M.; Ostgaard, S. E.; Rasmussen, S.	No influence of ibuprofen on bone healing after Colles' fracture - A randomized controlled clinical trial	2019	<30 pts per group
Oldmeadow, L. B.; Edwards, E. R.; Kimmel, L. A.; Kipen, E.; Robertson, V. J.; Bailey, M. J.	No rest for the wounded: early ambulation after hip surgery accelerates recovery	2006	< 30 per target group
Cibrian, K.	Nondrug Interventions Reduce Pain and Opioid Use After Total Knee Arthroplasty	2017	References Reviewed
Nigam, A. K.; Taylor, D. M.; Valeyeva, Z.	Non-invasive interactive neurostimulation (InterX) reduces acute pain in patients following total knee replacement surgery: a randomised, controlled trial	2011	<30 pts per group
Kan, S. L.; Yang, B.; Ning, G. Z.; Chen, L. X.; Li, Y. L.; Gao, S. J.; Chen, X. Y.; Sun, J. C.; Feng, S. Q.	Nonsteroidal Anti-inflammatory Drugs as Prophylaxis for Heterotopic Ossification after Total Hip Arthroplasty: A Systematic Review and Meta-Analysis	2015	References Reviewed
Joice, M.; Vasileiadis, G. I.; Amanatullah, D. F.	Non-steroidal anti-inflammatory drugs for heterotopic ossification prophylaxis after total hip arthroplasty: a systematic review and meta-analysis	2018	References Reviewed
Gombotz, H.; Lochner, R.; Sigl, R.; Blasl, J.; Herzer, G.; Trimmel, H.	Opiate sparing effect of fixed combination of diclofenac and orphenadrine after unilateral total hip arthroplasty: A double-blind, randomized, placebo-controlled, multi-centre clinical trial	2010	irrelevant combination: diclofenac and orphenadrine
Kelly, J. S.; Opsha, Y.; Costello, J.; Schiller, D.; Hola, E. T.	Opioid use in knee arthroplasty after receiving intravenous acetaminophen	2014	irrelevant topic; Non-RCT

Riddle, D. L.; Slover, J. D.; Ang, D. C.; Bair, M. J.; Kroenke, K.; Perera, R. A.; Dumenci, L.	Opioid use prior to knee arthroplasty in patients who catastrophize about their pain: preoperative data from a multisite randomized clinical trial	2018	non-RCT
Becchi, C.; Al Malyan, M.; Coppini, R.; Campolo, M.; Magherini, M.; Boncinelli, S.	Opioid-free analgesia by continuous psoas compartment block after total hip arthroplasty. A randomized study	2008	published before 2010
Kampitak, W.; Tanavalee, A.; Ngarmukos, S.; Amarase, C.	Opioid-Sparing Analgesia and Enhanced Recovery After Total Knee Arthroplasty Using Combined Triple Nerve Blocks With Local Infiltration Analgesia	2019	irrelevant comparison: block vs block
Cai, L.; Wang, Z.; Luo, X.; She, W.; Zhang, H.	Optimal strategies for the prevention of heterotopic ossification after total hip arthroplasty: A network meta-analysis	2019	references reviewed
Choi, S.; O'Hare, T.; Gollish, J.; Paul, J. E.; Kreder, H.; Thorpe, K. E.; Katz, J. D.; Mamdani, M.; Moisiuk, P.; McCartney, C. J.	Optimizing Pain and Rehabilitation After Knee Arthroplasty: A Two-Center, Randomized Trial	2016	confounding treatment: different timing and route
Cheung, C. W.; Ching Wong, S. S.; Qiu, Q.; Wang, X.	Oral Oxycodone for Acute Postoperative Pain: A Review of Clinical Trials	2017	References Reviewed
Rothwell, M. P.; Pearson, D.; Hunter, J. D.; Mitchell, P. A.; Graham-Woollard, T.; Goodwin, L.; Dunn, G.	Oral oxycodone offers equivalent analgesia to intravenous patient-controlled analgesia after total hip replacement: a randomized, single-centre, non-blinded, non-inferiority study	2011	work group exclusion; non-inferiority trial
Manassero, A.; Fanelli, A.; Ugues, S.; Bailo, C.; Dalmaso, S.	Oral prolonged-release oxycodone/naloxone offers equivalent analgesia to intravenous morphine patient-controlled analgesia after total knee replacement. A randomized controlled trial	2018	work group exclusion; not drug combination used in practice
Scott, D.	Osteoarthritis of the hip	2006	References Reviewed
Scott, D.; Kowalczyk, A.	Osteoarthritis of the knee	2007	References Reviewed
Hawker, G. A.; Mian, S.; Bednis, K.; Stanaitis, I.	Osteoarthritis year 2010 in review: non-pharmacologic therapy	2011	References Reviewed
Davis, A. M.; MacKay, C.	Osteoarthritis year in review: outcome of rehabilitation	2013	References Reviewed
Steinhaus, M. E.; Rosneck, J.; Ahmad, C. S.; Lynch, T. S.	Outcomes After Peripheral Nerve Block in Hip Arthroscopy	2018	References Reviewed
Aveline, C.; Roux, A. L.; Hetet, H. L.; Gautier, J. F.; Vautier, P.; Cognet, F.; Bonnet, F.	Pain and recovery after total knee arthroplasty: a 12-month follow-up after a prospective randomized study evaluating Nefopam and Ketamine for early rehabilitation	2014	<30 pts per group

Ashraf, A.; Raut, V. V.; Canty, S. J.; McLauchlan, G. J.	Pain control after primary total knee replacement. A prospective randomised controlled trial of local infiltration versus single shot femoral nerve block	2013	<20 pts per group
Shin, J. J.; McCrum, C. L.; Mauro, C. S.; Vyas, D.	Pain Management After Hip Arthroscopy: Systematic Review of Randomized Controlled Trials and Cohort Studies	2018	References Reviewed
Secrist, E. S.; Freedman, K. B.; Ciccotti, M. G.; Mazur, D. W.; Hammoud, S.	Pain Management After Outpatient Anterior Cruciate Ligament Reconstruction: A Systematic Review of Randomized Controlled Trials	2016	references reviewed
Warrender, W. J.; Syed, U. A. M.; Hammoud, S.; Emper, W.; Ciccotti, M. G.; Abboud, J. A.; Freedman, K. B.	Pain Management After Outpatient Shoulder Arthroscopy: A Systematic Review of Randomized Controlled Trials	2017	references reviewed
Spinarelli, A.; Moretti, L.; Marella, G.; Solarino, G.; Maccagnano, G.; Moretti, B.	PAIN MANAGEMENT AFTER TOTAL KNEE ARTHROPLASTY: THE GOOD, THE BAD AND THE UGLY	2015	Irrelevant comparison: oral vs IV analgesia
Koh, I. J.; Chang, C. B.; Seo, E. S.; Kim, S. J.; Seong, S. C.; Kim, T. K.	Pain management by periarticular multimodal drug injection after anterior cruciate ligament reconstruction: a randomized, controlled study	2012	irrelevant comparison: intra-articular vs control
Abdallah, F. W.; Brull, R.; Joshi, G. P.	Pain Management for Ambulatory Arthroscopic Anterior Cruciate Ligament Reconstruction: Evidence-Based Recommendations From the Society for Ambulatory Anesthesia	2019	References Reviewed
Wang, J.; Liu, G. T.; Mayo, H. G.; Joshi, G. P.	Pain Management for Elective Foot and Ankle Surgery: A Systematic Review of Randomized Controlled Trials	2015	references reviewed
Moghtadaei, M.; Farahini, H.; Faiz, S. H.; Mokarami, F.; Safari, S.	Pain Management for Total Knee Arthroplasty: Single-Injection Femoral Nerve Block versus Local Infiltration Analgesia	2014	<20 pts per group
Terkawi, A. S.; Mavridis, D.; Sessler, D. I.; Nunemaker, M. S.; Doais, K. S.; Terkawi, R. S.; Terkawi, Y. S.; Petropoulou, M.; Nemergut, E. C.	Pain Management Modalities after Total Knee Arthroplasty: A Network Meta-analysis of 170 Randomized Controlled Trials	2017	references reviewed
Helmerhorst, G. T. T.; Zwiers, R.; Ring, D.; Kloen, P.	Pain Relief After Operative Treatment of an Extremity Fracture: A Noninferiority Randomized Controlled Trial	2017	<60 total pts
Divella, M.; Cecconi, M.; Fasano, N.; Langiano, N.; Buttazoni, M.; Gimigliano, I.; Della Rocca, G.	Pain relief after total hip replacement: oral CR oxycodone plus IV paracetamol versus epidural levobupivacaine and sufentanil. A randomized controlled trial	2012	irrelevant comparison: epidural vs oral
Liu, X.; Zhao, X.; Lou, J.; Wang, Y.; Shen, X.	Parecoxib added to ropivacaine prolongs duration of axillary brachial plexus blockade and relieves postoperative pain	2013	mixed population; includes carpal tunnel and hand surgery

Sarridou, D. G.; Chalmouki, G.; Braoudaki, M.; Siafaka, I.; Asmatzi, C.; Vadalouka, A.	Parecoxib Possesses Anxiolytic Properties in Patients Undergoing Total Knee Arthroplasty: A Prospective, Randomized, Double-Blind, Placebo-Controlled, Clinical Study	2016	no outcomes interest; cognitive measures
Zhu, Y. Z.; Yao, R.; Zhang, Z.; Xu, H.; Wang, L. W.	Parecoxib prevents early postoperative cognitive dysfunction in elderly patients undergoing total knee arthroplasty: A double-blind, randomized clinical consort study	2016	work group exclusion; intervention not used in US
Hubbard, R. C.; Naumann, T. M.; Traylor, L.; Dhadda, S.	Parecoxib sodium has opioid-sparing effects in patients undergoing total knee arthroplasty under spinal anaesthesia	2003	published before 2010
Camu, F.; Borgeat, A.; Heylen, R. J.; Viel, E. J.; Boye, M. E.; Cheung, R. Y.	Parecoxib, propacetamol, and their combination for analgesia after total hip arthroplasty: a randomized non-inferiority trial	2017	work group exclusion; intervention not used in US
Hol, A. M.; van Grinsven, S.; Lucas, C.; van Susante, J. L.; van Loon, C. J.	Partial versus unrestricted weight bearing after an uncemented femoral stem in total hip arthroplasty: recommendation of a concise rehabilitation protocol from a systematic review of the literature	2010	References Reviewed
den Hertog, A.; Gliesche, K.; Timm, J.; Muhlbauer, B.; Zebrowski, S.	Pathway-controlled fast-track rehabilitation after total knee arthroplasty: a randomized prospective clinical study evaluating the recovery pattern, drug consumption, and length of stay	2012	irrelevant comparison; multimodal vs conventional rehab
Lutti, M. N.; Vieira, J. L.; Eickhoff, D. R.; de Carli, D.; de Carvalho, M. A.	Patient controlled analgesia with fentanyl or sufentanil in the postoperative period of knee ligament reconstruction: comparative study	2002	published before 2010
Hordam, B.; Boolsen, M. W.	Patient involvement in own rehabilitation after early discharge	2017	insufficient data for target outcomes
Kastanias, P.; Gowans, S.; Tumber, P. S.; Snaith, K.; Robinson, S.	Patient-controlled oral analgesia for postoperative pain management following total knee replacement	2010	irrelevant comparison; patient-controlled oral analgesia vs. traditional nurse administered oral analgesia
Dasa, V.; Lensing, G.; Parsons, M.; Harris, J.; Volaufova, J.; Bliss, R.	Percutaneous freezing of sensory nerves prior to total knee arthroplasty	2016	non-RCT
Pandazi, A.; Kanellopoulos, I.; Kalimeris, K.; Batistaki, C.; Nikolakopoulos, N.; Matsota, P.; Babis, G. C.; Kostopanagiotou, G.	Periarticular infiltration for pain relief after total hip arthroplasty: a comparison with epidural and PCA analgesia	2013	< 30 per target group
Alijanipour, P.; Tan, T. L.; Matthews, C. N.; Viola, J. R.; Purtill, J. J.; Rothman, R. H.; Parvizi, J.; Austin, M. S.	Periarticular Injection of Liposomal Bupivacaine Offers No Benefit Over Standard Bupivacaine in Total Knee Arthroplasty: A Prospective, Randomized, Controlled Trial	2017	irrelevant comparison: liposomal bupivacaine vs bupivacaine HCl

Kwon, S. K.; Yang, I. H.; Bai, S. J.; Han, C. D.	Periarticular injection with corticosteroid has an additional pain management effect in total knee arthroplasty	2014	irrelevant comparison: periarticular with vs without corticosteroid
Marino, J.; Scuderi, G.; Dowling, O.; Farquhar, R.; Freycinet, B.; Overdyk, F.	Periarticular Knee Injection With Liposomal Bupivacaine and Continuous Femoral Nerve Block for Postoperative Pain Management After Total Knee Arthroplasty: A Randomized Controlled Trial	2019	not a comparison of interest: block vs control
Smith, E. B.; Kazarian, G. S.; Maltenfort, M. G.; Lonner, J. H.; Sharkey, P. F.; Good, R. P.	Periarticular Liposomal Bupivacaine Injection Versus Intra-Articular Bupivacaine Infusion Catheter for Analgesia After Total Knee Arthroplasty: A Double-Blinded, Randomized Controlled Trial	2017	Irrelevant comparison; local anesthesia vs placebo
Pang, H. N.; Lo, N. N.; Yang, K. Y.; Chong, H. C.; Yeo, S. J.	Peri-articular steroid injection improves the outcome after unicondylar knee replacement: a prospective, randomised controlled trial with a two-year follow-up	2008	irrelevant comparison: periarticular injection vs control
Pinsornsak, P.; Rojanavijitkul, S.; Chumchuen, S.	Peri-articular tranexamic acid injection in total knee arthroplasty: a randomized controlled trial	2016	irrelevant comparison; PAI vs IV
Spence, D.; Goff, J.; Mohan, E.; Bowen, K.; Osborne, L.; Maye, J.	Perioperative administration of gabapentin for shoulder arthroscopy: a prospective, randomized, double-blind, placebo-controlled study	2011	>30 patients per group
Nimmaanrat, S.; Tangtrakulwanish, B.; Klaklay, P.; Boonriong, T.	Perioperative administration of pregabalin in patients undergoing arthroscopic anterior cruciate ligament reconstruction: does it help to relieve postoperative pain?	2012	<30 Pts per group
Lin, J.; Zhang, L.; Yang, H.	Perioperative administration of selective cyclooxygenase-2 inhibitors for postoperative pain management in patients after total knee arthroplasty	2013	References Reviewed
Winkler, S. H.; Barta, S.; Kehl, V.; Schroter, C.; Wagner, F.; Grifka, J.; Springorum, H. R.; Craiovan, B.	Perioperative blood loss and gastrointestinal tolerability of etoricoxib and diclofenac in total hip arthroplasty (ETO-DIC study): a single-center, prospective double-blinded randomized controlled trial	2016	work group exclusion; not comparison of interest
Sivrikoz, N.; Koltka, K.; Guresti, E.; Buget, M.; Senturk, M.; Ozyalcin, S.	Perioperative dexketoprofen or lornoxicam administration for pain management after major orthopedic surgery: a randomized, controlled study	2014	work group exclusion; intervention not used in US
Brinck, E. C.; Tiippana, E.; Heesen, M.; Bell, R. F.; Straube, S.; Moore, R. A.; Kontinen, V.	Perioperative intravenous ketamine for acute postoperative pain in adults	2018	References Reviewed
O'Donnell, C. M.; McLoughlin, L.; Patterson, C. C.; Clarke, M.; McCourt, K. C.; McBrien, M. E.; McAuley, D. F.; Shields, M. O.	Perioperative outcomes in the context of mode of anaesthesia for patients undergoing hip fracture surgery: systematic review and meta-analysis	2018	References Reviewed

Bech, N. H.; Hulst, A. H.; Spuijbroek, J. A.; van Leuken, L. L.; Haverkamp, D.	Perioperative pain management in hip arthroscopy; what options are there?	2016	References Reviewed
Guay, J.; Parker, M. J.; Griffiths, R.; Kopp, S.	Peripheral nerve blocks for hip fractures	2017	References Reviewed
Guay, J.; Parker, M. J.; Griffiths, R.; Kopp, S. L.	Peripheral Nerve Blocks for Hip Fractures: A Cochrane Review	2018	References Reviewed
Xu, J.; Chen, X. M.; Ma, C. K.; Wang, X. R.	Peripheral nerve blocks for postoperative pain after major knee surgery	2014	References Reviewed
Allegri, M.; Ornaghi, M.; Ferland, C. E.; Bugada, D.; Meghani, Y.; Calcinati, S.; De Gregori, M.; Lovisari, F.; Radhakrishnan, K.; Cusato, M.; Scalia Catenacci, S.; Somaini, M.; Fanelli, G.; Ingelmo, P.	Peritoneal Nebulization of Ropivacaine during Laparoscopic Cholecystectomy: Dose Finding and Pharmacokinetic Study	2017	non musculoskeletal surgery
Pirowska, A.; Wloch, T.; Nowobilski, R.; Plaszewski, M.; Hocini, A.; Menager, D.	Phantom phenomena and body scheme after limb amputation: a literature review	2014	References Reviewed
Minkowitz, H. S.; Singla, N. K.; Evashenk, M. A.; Hwang, S. S.; Chiang, Y. K.; Hamel, L. G.; Palmer, P. P.	Pharmacokinetics of sublingual sufentanil tablets and efficacy and safety in the management of postoperative pain	2013	irrelevant comparison: different doses
Alviar, M. J.; Hale, T.; Dungca, M.	Pharmacologic interventions for treating phantom limb pain	2011	References Reviewed
Alviar, M. J.; Hale, T.; Dungca, M.	Pharmacologic interventions for treating phantom limb pain	2016	References Reviewed
Taraldsen, K.; Sletvold, O.; Thingstad, P.; Saltvedt, I.; Granat, M. H.; Lydersen, S.; Helbostad, J. L.	Physical behavior and function early after hip fracture surgery in patients receiving comprehensive geriatric care or orthopedic care--a randomized controlled trial	2014	irrelevant comparison; multimodal geriatric vs conventional rehab
	Physiotherapy rehabilitation after total knee or hip replacement: an evidence-based analysis	2005	References Reviewed
Giraudet-Le Quintrec, J. S.; Coste, J.; Vastel, L.; Pacault, V.; Jeanne, L.; Lamas, J. P.; Kerboull, L.; Fougeray, M.; Conseiller, C.; Kahan, A.; Courpied, J. P.	Positive effect of patient education for hip surgery: a randomized trial	2003	irrelevant topic; pre-admission education; not periop window

Krenzel, B. A.; Cook, C.; Martin, G. N.; Vail, T. P.; Attarian, D. E.; Bolognesi, M. P.	Posterior capsular injections of ropivacaine during total knee arthroplasty: a randomized, double-blind, placebo-controlled study	2009	irrelevant comparison; block vs placebo
	Post-op pain and blood loss in total knee arthroplasty: an RCT using periarticular injection with diclofenac-based multimodal drugs	2014	Irrelevant comparison; local anesthesia vs control
Aveline, C.; Gautier, J. F.; Vautier, P.; Cognet, F.; Hetet, H. L.; Attali, J. Y.; Leconte, V.; Leborgne, P.; Bonnet, F.	Postoperative analgesia and early rehabilitation after total knee replacement: a comparison of continuous low-dose intravenous ketamine versus nefopam	2009	irrelevant comparison; ketamine vs nefopam
McQuay, H. J.; Moore, R. A.	Postoperative analgesia and vomiting, with special reference to day-case surgery: a systematic review	1998	References Reviewed
Bertini, L.; Mancini, S.; Di Benedetto, P.; Ciaschi, A.; Martini, O.; Nava, S.; Tagariello, V.	Postoperative analgesia by combined continuous infusion and patient-controlled epidural analgesia (PCEA) following hip replacement: ropivacaine versus bupivacaine	2001	irrelevant comparison; block vs block
McNamee, D. A.; Parks, L.; Milligan, K. R.	Post-operative analgesia following total knee replacement: an evaluation of the addition of an obturator nerve block to combined femoral and sciatic nerve block	2002	irrelevant comparison; block vs block
Koltka, K.; Dogruel, B.; Senturk, M.; Atalar, A. C.; Kucukay, S.; Pembeci, K.	Postoperative analgesia for arthroscopic rotator cuff surgery: a comparison between subacromial and interscalene levobupivacaine	2011	irrelevant comparison; block vs block
Fontana, C.; Di Donato, A.; Di Giacomo, G.; Costantini, A.; De Vita, A.; Lancia, F.; Caricati, A.	Postoperative analgesia for arthroscopic shoulder surgery: a prospective randomized controlled study of intraarticular, subacromial injection, interscalenic brachial plexus block and intraarticular plus subacromial injection efficacy	2009	irrelevant comparison; block vs block
Joshi, W.; Reuben, S. S.; Kilaru, P. R.; Sklar, J.; Maciolek, H.	Postoperative analgesia for outpatient arthroscopic knee surgery with intraarticular clonidine and/or morphine	2000	published before 2010
Follak, N.; Ganzer, D.	Postoperative analgesic value of the intra-articular instillation of bupivacaine and morphine after arthroscopic knee surgery	2001	published before 2010
Leung, P.; Dickerson, D. M.; Denduluri, S. K.; Mohammed, M. K.; Lu, M.; Anitescu, M.; Luu, H. H.	Postoperative continuous adductor canal block for total knee arthroplasty improves pain and functional recovery: A randomized controlled clinical trial	2018	irrelevant comparison; regional vs placebo
Stromberg, L.; Ohlen, G.; Nordin, C.; Lindgren, U.; Svensson, O.	Postoperative mental impairment in hip fracture patients. A randomized study of reorientation measures in 223 patients	1999	irrelevant topic; re-orientation methods



Chu, C. P.; Yap, J. C.; Chen, P. P.; Hung, H. H.	Postoperative outcome in Chinese patients having primary total knee arthroplasty under general anaesthesia/intravenous patient-controlled analgesia compared to spinal-epidural anaesthesia/analgesia	2006	published before 2010
Hojer Karlsen, A. P.; Geisler, A.; Petersen, P. L.; Mathiesen, O.; Dahl, J. B.	Postoperative pain treatment after total hip arthroplasty: a systematic review	2015	References Reviewed
Karlsen, A. P.; Wetterslev, M.; Hansen, S. E.; Hansen, M. S.; Mathiesen, O.; Dahl, J. B.	Postoperative pain treatment after total knee arthroplasty: A systematic review	2017	References Reviewed
Wollstein, R.; Harel, H.; Lavi, I.; Allon, R.; Michael, D.	Postoperative Treatment of Distal Radius Fractures Using Sensorimotor Rehabilitation	2019	< 30 per target group
Walker, R. H.; Morris, B. A.; Angulo, D. L.; Schneider, J.; Colwell, C. W., Jr.	Postoperative use of continuous passive motion, transcutaneous electrical nerve stimulation, and continuous cooling pad following total knee arthroplasty	1991	< 60 total pts
Fu, H.; Wang, J.; Zhang, W.; Cheng, T.; Zhang, X.	Potential superiority of periarticular injection in analgesic effect and early mobilization ability over femoral nerve block following total knee arthroplasty	2017	References Reviewed
Mayr, H. O.; Entholzner, E.; Hube, R.; Hein, W.; Weig, T. G.	Pre- versus postoperative intraarticular application of local anesthetics and opioids versus femoral nerve block in anterior cruciate ligament repair	2007	confounding treatment; different timing, route and medications
Haentjens, P.; Autier, P.; Barette, M.; Boonen, S.	Predictors of functional outcome following intracapsular hip fracture in elderly women. A one-year prospective cohort study	2005	non-rct
Voshaar, R. C.; Banerjee, S.; Horan, M.; Baldwin, R.; Pendleton, N.; Proctor, R.; Tarrier, N.; Woodward, Y.; Burns, A.	Predictors of incident depression after hip fracture surgery	2007	non-rct
Berman, J. E.; Mata-Fink, A.; Kassam, H. F.; Blaine, T. A.; Kovacevic, D.	Predictors of Length of Stay and Discharge Disposition After Shoulder Arthroplasty: A Systematic Review	2019	References Reviewed
Lim, K. K.; Matchar, D. B.; Chong, J. L.; Yeo, W.; Howe, T. S.; Koh, J. S. B.	Pre-discharge prognostic factors of physical function among older adults with hip fracture surgery: a systematic review	2019	references reviewed
Peng, H. M.; Wang, L. C.; Wang, W.; Tang, Q. H.; Qian, W. W.; Lin, J.; Jin, J.; Feng, B.; Yin, X. H.; Weng, X. S.; Zhou, Y. X.	Preemptive Analgesia with Parecoxib in Total Hip Arthroplasty: A Randomized, Double-Blind, Placebo-Controlled Trial	2018	work group exclusion; intervention not used in US

Montazeri, K.; Kashefi, P.; Honarmand, A.	Pre-emptive gabapentin significantly reduces postoperative pain and morphine demand following lower extremity orthopaedic surgery	2007	work group exclusion; mixed population
Motififard, M.; Omidian, A.; Badiei, S.	Pre-emptive injection of peri-articular-multimodal drug for post-operative pain management in total knee arthroplasty: a double-blind randomized clinical trial	2017	irrelevant comparison: block vs block
Liszka, H.; Gadek, A.	Preemptive Local Anesthesia in Ankle Arthroscopy	2016	irrelevant comparison: GA vs spinal vs placebo
Mathiesen, O.; Jacobsen, L. S.; Holm, H. E.; Randall, S.; Adamiec-Malmstroem, L.; Graungaard, B. K.; Holst, P. E.; Hilsted, K. L.; Dahl, J. B.	Pregabalin and dexamethasone for postoperative pain control: a randomized controlled study in hip arthroplasty	2008	irrelevant combination; gabapentinoids + glucocorticoid
YaDeau, J. T.; Lin, Y.; Mayman, D. J.; Goytizolo, E. A.; Alexiades, M. M.; Padgett, D. E.; Kahn, R. L.; Jules-Elysee, K. M.; Ranawat, A. S.; Bhagat, D. D.; Fields, K. G.; Goon, A. K.; Curren, J.; Westrich, G. H.	Pregabalin and pain after total knee arthroplasty: a double-blind, randomized, placebo-controlled, multidose trial	2015	<30 pts per group
Ul Huda, A.; Jordan, R. W.; Daggett, M.; Saithna, A.	Pre-medication with Gabapentin is associated with significant reductions in nausea and vomiting after shoulder arthroscopy: A meta-analysis	2019	references r
Matot, I.; Oppenheim-Eden, A.; Ratrot, R.; Baranova, J.; Davidson, E.; Eylon, S.; Peyser, A.; Liebergall, M.	Preoperative cardiac events in elderly patients with hip fracture randomized to epidural or conventional analgesia	2003	irrelevant comparison: epidural vs intramuscular
McDonald, S.; Page, M. J.; Beringer, K.; Wasiak, J.; Sprowson, A.	Preoperative education for hip or knee replacement	2014	References Reviewed
McDonald, S.; Hetrick, S.; Green, S.	Pre-operative education for hip or knee replacement	2004	References Reviewed
Daltroy, L. H.; Morlino, C. I.; Eaton, H. M.; Poss, R.; Liang, M. H.	Preoperative education for total hip and knee replacement patients	1998	insufficient data for target outcomes
Skjold, C.; Moller, A. M.; Wildgaard, K.	Pre-operative femoral nerve block for hip fracture-A systematic review with meta-analysis	2019	References Reviewed
Sheen, M. J.; Ho, S. T.; Lee, C. H.; Tsung, Y. C.; Chang, F. L.	Preoperative gabapentin prevents intrathecal morphine-induced pruritus after orthopedic surgery	2008	work group exclusion; not focusing on pain relief
Zhou, Z. J.; Tang, J.; Li, W. H.; Tao, W. D.	Preoperative intravenous flurbiprofen reduces postoperative pain and inflammatory cytokines in elderly patients after hip arthroplasty	2019	work group exclusion; not route of interest

Goplen, C. M.; Verbeek, W.; Kang, S. H.; Jones, C. A.; Voaklander, D. C.; Churchill, T. A.; Beaupre, L. A.	Preoperative opioid use is associated with worse patient outcomes after Total joint arthroplasty: a systematic review and meta-analysis	2019	References Reviewed
Whitney, J. A.; Parkman, S.	Preoperative physical activity, anesthesia, and analgesia: effects on early postoperative walking after total hip replacement	2002	published before 2010
Liao, C. D.; Tsauo, J. Y.; Huang, S. W.; Chen, H. C.; Chiu, Y. S.; Liou, T. H.	Preoperative range of motion and applications of continuous passive motion predict outcomes after knee arthroplasty in patients with arthritis	2019	References Reviewed
Tang, Q.; Li, X.; Yu, L.; Hao, Y.; Lu, G.	Preoperative ropivacaine with or without tramadol for femoral nerve block in total knee arthroplasty	2016	irrelevant comparison: block with vs without tramadol
Deschodt, M.; Braes, T.; Flamaing, J.; Detroyer, E.; Broos, P.; Haentjens, P.; Boonen, S.; Milisen, K.	Preventing delirium in older adults with recent hip fracture through multidisciplinary geriatric consultation	2012	Outcomes are not of interest
Kaye, I. D.; Patel, D. N.; Strauss, E. J.; Alaia, M. J.; Garofolo, G.; Martinez, A.; Jazrawi, L. M.	Prevention of Venous Thromboembolism after Arthroscopic Knee Surgery in a Low-Risk Population with the Use of Aspirin. A Randomized Trial	2015	work group exclusion; not focusing on pain relief
Diaz-Heredia, J.; Loza, E.; Cebreiro, I.; Ruiz Iban, M. A.	Preventive analgesia in hip or knee arthroplasty: a systematic review	2015	References Reviewed
Fischer, H. B.; Simanski, C. J.	A procedure-specific systematic review and consensus recommendations for analgesia after total hip replacement	2005	References Reviewed
Fischer, H. B.; Simanski, C. J.; Sharp, C.; Bonnet, F.; Camu, F.; Neugebauer, E. A.; Rawal, N.; Joshi, G. P.; Schug, S. A.; Kehlet, H.	A procedure-specific systematic review and consensus recommendations for postoperative analgesia following total knee arthroplasty	2008	References Reviewed
Kuusniemi, K.; Zollner, J.; Sjøvall, S.; Huhtala, J.; Karjalainen, P.; Kokki, M.; Lemken, J.; Oppermann, J.; Kokki, H.	Prolonged-release oxycodone/naloxone in postoperative pain management: from a randomized clinical trial to usual clinical practice	2012	work group exclusion; not drug combination used in practice
Zhou, T. J.; Tang, J.; White, P. F.	Propacetamol versus ketorolac for treatment of acute postoperative pain after total hip or knee replacement	2001	published before 2010
Safavi, M.; Honarmand, A.; Mohammadsadeqie, S.	Prophylactic use of intravenous ondansetron versus ketamine - midazolam combination for prevention of shivering during spinal anesthesia: A randomized double-blind placebo-controlled trial	2015	irrelevant combination: ketamine plus midazolam

Toma, O.; Persoons, B.; Pogatzki-Zahn, E.; Van de Velde, M.; Joshi, G. P.	PROSPECT guideline for rotator cuff repair surgery: systematic review and procedure-specific postoperative pain management recommendations	2019	References Reviewed
Astur, D. C.; Aleluia, V.; Veronese, C.; Astur, N.; Oliveira, S. G.; Arliani, G. G.; Badra, R.; Kaleka, C. C.; Amaro, J. T.; Cohen, M.	A prospective double blinded randomized study of anterior cruciate ligament reconstruction with hamstrings tendon and spinal anesthesia with or without femoral nerve block	2014	< 20 per injection group
Garner, M.; Alshameeri, Z.; Sardesai, A.; Khanduja, V.	A Prospective Randomized Controlled Trial Comparing the Efficacy of Fascia Iliaca Compartment Block Versus Local Anesthetic Infiltration After Hip Arthroscopic Surgery	2017	work group exclusion; not population of interest
Sabesan, V. J.; Shahriar, R.; Petersen-Fitts, G. R.; Whaley, J. D.; Bou-Akl, T.; Sweet, M.; Milia, M.	A prospective randomized controlled trial to identify the optimal postoperative pain management in shoulder arthroplasty: liposomal bupivacaine versus continuous interscalene catheter	2017	irrelevant comparison: block vs block
Machino, M.; Yukawa, Y.; Hida, T.; Oka, Y.; Terashima, T.; Kinoshita, S.; Kato, F.	A prospective randomized study for postoperative pain relief of lower extremity fractures: efficacy of intrathecal morphine administration	2010	< 30 per target group
Talmo, C. T.; Kent, S. E.; Fredette, A. N.; Anderson, M. C.; Hassan, M. K.; Mattingly, D. A.	Prospective Randomized Trial Comparing Femoral Nerve Block With Intraoperative Local Anesthetic Injection of Liposomal Bupivacaine in Total Knee Arthroplasty	2018	irrelevant comparison; block vs control
Maalouf, D. B.; Dorman, S. M.; Sebeo, J.; Goytizolo, E. A.; Gordon, M. A.; Yadeau, J. T.; Dehipawala, S. S.; Fields, K.	Prospective, Randomized Double-Blind Study: Does Decreasing Interscalene Nerve Block Volume for Surgical Anesthesia in Ambulatory Shoulder Surgery Offer Same-Day Patient Recovery Advantages?	2016	irrelevant comparison; block vs block
Littlewood, C.; Bateman, M.; Cooke, K.; Hennings, S.; Cookson, T.; Bromley, K.; Lewis, M.; Funk, L.; Denton, J.; Moffatt, M.; Winstanley, R.; Mehta, S.; Stephens, G.; Dikomitis, L.; Chesterton, L.; Foster, N. E.	Protocol for a multi-centre pilot and feasibility randomised controlled trial with a nested qualitative study: rehabilitation following rotator cuff repair (the RaCeR study)	2019	References Reviewed
Ferriero, G.; Kristensen, M. T.; Invernizzi, M.; Salgovic, L.; Bravini, E.; Sartorio, F.; Vercelli, S.	Psychometric properties of the Cumulated Ambulation Score: a systematic review	2018	References Reviewed

te Wierike, S. C.; van der Sluis, A.; van den Akker-Scheek, I.; Elferink-Gemser, M. T.; Visscher, C.	Psychosocial factors influencing the recovery of athletes with anterior cruciate ligament injury: a systematic review	2013	References Reviewed
Peeters, C. M.; Visser, E.; Van de Ree, C. L.; Gosens, T.; Den Oudsten, B. L.; De Vries, J.	Quality of life after hip fracture in the elderly: A systematic literature review	2016	irrelevant comparison; health status and health related QOL of different surgeries, home rehab and nutritional supplementation
Tidermark, J.	Quality of life and femoral neck fractures	2003	Irrelevant comparisons; type of surgeries
Olive, D. J.; Barrington, M. J.; Simone, S. A.; Kluger, R.	A randomised controlled trial comparing three analgesia regimens following total knee joint replacement: continuous femoral nerve block, intrathecal morphine or both	2015	< 30 per target group
Campo, M. M.; Kerkhoffs, G. M.; Sierevelt, I. N.; Weeseman, R. R.; Van der Vis, H. M.; Albers, G. H.	A randomised controlled trial for the effectiveness of intra-articular Ropivacaine and Bupivacaine on pain after knee arthroscopy: the DUPRA (DUtch Pain Relief after Arthroscopy)-trial	2012	irrelevant comparison: intra-articular vs placebo
Ambrosoli, A. L.; Chiaranda, M.; Fedele, L. L.; Gemma, M.; Cedrati, V.; Cappelleri, G.	A randomised controlled trial of intrathecal blockade versus peripheral nerve blockade for day-case knee arthroscopy	2016	irrelevant comparison; regional vs regional anesthesia
Costa, M. L.; MacMillan, K.; Halliday, D.; Chester, R.; Shepstone, L.; Robinson, A. H.; Donell, S. T.	Randomised controlled trials of immediate weight-bearing mobilisation for rupture of the tendo Achillis	2006	< 60 total pts
Kearns, R.; Macfarlane, A.; Grant, A.; Puxty, K.; Harrison, P.; Shaw, M.; Anderson, K.; Kinsella, J.	A randomised, controlled, double blind, non-inferiority trial of ultrasound-guided fascia iliaca block vs. spinal morphine for analgesia after primary hip arthroplasty	2016	irrelevant comparison; block vs block
Imbelloni, L. E.; Gouveia, M. A.; Vieira, E. M.; Cordeiro, J. A.	A randomised, double-blind comparison of three different volumes of hypobaric intrathecal bupivacaine for orthopaedic surgery	2009	irrelevant comparison: different doses
McQuay, H. J.; Moore, R. A.; Berta, A.; Gainutdinovs, O.; Fulesdi, B.; Porvaneckas, N.; Petronis, S.; Mitkovic, M.; Bucsi, L.; Samson, L.; Zegunis, V.; Ankin, M. L.; Bertolotti, M.; Piza-Vallespir, B.; Cuadripani, S.; Contini, M. P.; Nizzardo, A.	Randomized clinical trial of dexketoprofen/tramadol 25 mg/75 mg in moderate-to-severe pain after total hip arthroplasty	2016	work group exclusion; intervention not used in US

Yang, C. W.; Jung, S. M.; Kang, P. S.; Kwon, H. U.; Cho, C. K.; Lee, Y.; Kim, C. W.; Kim, S. Y.	A randomized comparison of ropivacaine 0.1% and 0.2% for continuous interscalene block after shoulder surgery	2013	Irrelevant comparison; different anesthetic dose
Roddey, T. S.; Olson, S. L.; Gartsman, G. M.; Hanten, W. P.; Cook, K. F.	A randomized controlled trial comparing 2 instructional approaches to home exercise instruction following arthroscopic full-thickness rotator cuff repair surgery	2002	irrelevant comparison; home pt education video vs home pamphlet
Hoh, S. Y.; Doon, Y. K.; Chong, S. S.; Ng, K. L.	Randomized controlled trial comparing bilateral superficial cervical plexus block and local wound infiltration for pain control in thyroid surgery	2019	thyroidectomy patients
Nazir, N.; Jain, S.	Randomized Controlled Trial for Evaluating the Analgesic Effect of Nalbuphine as an Adjuvant to Bupivacaine in Supraclavicular Block under Ultrasound Guidance	2017	irrelevant comparison: nalbuphine vs control
Sajedi, P.; Nemati, M.; Mosavi, S. H.; Honarmand, A.; Safavi, M. R.	A randomized controlled trial for the effectiveness of intraarticular versus intravenous midazolam on pain after knee arthroscopy	2014	irrelevant comparison; IV vs local anesthesia
Porter, M. D.; Shadbolt, B.	Randomized controlled trial of accelerated rehabilitation versus standard protocol following surgical repair of ruptured Achilles tendon	2015	multimodal PT
Wilson, R. A.; Watt-Watson, J.; Hodnett, E.; Tranmer, J.	A Randomized Controlled Trial of an Individualized Preoperative Education Intervention for Symptom Management After Total Knee Arthroplasty	2016	irrelevant topic; pre-admission education; not periop window
Namdari, S.; Nicholson, T.; Abboud, J.; Lazarus, M.; Steinberg, D.; Williams, G.	Randomized Controlled Trial of Interscalene Block Compared with Injectable Liposomal Bupivacaine in Shoulder Arthroplasty	2017	irrelevant comparison; IV vs local anesthesia
Solheim, N.; Gregersen, I.; Halvorsen, B.; Bjerkeli, V.; Stubhaug, A.; Gordh, T.; Rosseland, L. A.	Randomized controlled trial of intra-articular ketorolac on pain and inflammation after minor arthroscopic knee surgery	2018	<30 pts per group
Hall, M. J.; Dixon, S. M.; Bracey, M.; MacIntyre, P.; Powell, R. J.; Toms, A. D.	A randomized controlled trial of postoperative analgesia following total knee replacement: transdermal Fentanyl patches versus patient controlled analgesia (PCA)	2015	< 30 per target group
Affas, F.; Stiller, C. O.; Nygard, E. B.; Stephanson, N.; Wretenberg, P.; Olofsson, C.	A randomized study comparing plasma concentration of ropivacaine after local infiltration analgesia and femoral block in primary total knee arthroplasty	2012	<20 pts per group
Park, Y. B.; Ha, C. W.; Cho, S. D.; Lee, M. C.; Lee, J. H.; Seo, S. S.; Kang, S. B.; Kyung, H. S.; Choi, C. H.; Chang, N.; Rhim, H. Y.; Bin, S. I.	A randomized study to compare the efficacy and safety of extended-release and immediate-release tramadol HCl/acetaminophen in patients with acute pain following total knee replacement	2015	irrelevant comparison: extended release vs immediate release tramadol/acetaminophen

Ebert, J. R.; Fallon, M.; Zheng, M. H.; Wood, D. J.; Ackland, T. R.	A randomized trial comparing accelerated and traditional approaches to postoperative weightbearing rehabilitation after matrix-induced autologous chondrocyte implantation: findings at 5 years	2012	irrelevant comparison; accelerated vs traditional post-discharge weightbearing rehab; starts same time/not early
Nader, A.; Kendall, M. C.; Wixson, R. L.; Chung, B.; Polakow, L. M.; McCarthy, R. J.	A randomized trial of epidural analgesia followed by continuous femoral analgesia compared with oral opioid analgesia on short- and long-term functional recovery after total knee replacement	2012	irrelevant comparison; block vs opioid
Andersen, K. V.; Bak, M.; Christensen, B. V.; Harazuk, J.; Pedersen, N. A.; Soballe, K.	A randomized, controlled trial comparing local infiltration analgesia with epidural infusion for total knee arthroplasty	2010	<20 pts per group
Bramlett, K.; Onel, E.; Viscusi, E. R.; Jones, K.	A randomized, double-blind, dose-ranging study comparing wound infiltration of DepoFoam bupivacaine, an extended-release liposomal bupivacaine, to bupivacaine HCl for postsurgical analgesia in total knee arthroplasty	2012	irrelevant comparison: different doses
Abdulla, S.; Eckhardt, R.; Netter, U.; Abdulla, W.	Randomized, Double-Blind, Placebo-Controlled Study to Assess the Efficacy of Nonopioid Analgesics on Pain following Arthroscopic Knee Surgery	2012	work group exclusion; intervention not used in US
Dysart, S.; Snyder, M. A.; Mont, M. A.	A Randomized, Multicenter, Double-Blind Study of Local Infiltration Analgesia with Liposomal Bupivacaine for Postsurgical Pain Following Total Knee Arthroplasty: Rationale and Design of the Pillar Trial	2016	irrelevant comparison; local vs local anesthesia
Barker, K. L.; Newman, M. A.; Hughes, T.; Sackley, C.; Pandit, H.; Kiran, A.; Murray, D. W.	Recovery of function following hip resurfacing arthroplasty: a randomized controlled trial comparing an accelerated versus standard physiotherapy rehabilitation programme	2013	multimodal PT
Abrisham, S. M.; Ghahramani, R.; Heiranizadeh, N.; Kermani-Alghoraishi, M.; Ayatollahi, V.; Pahlavanhosseini, H.	Reduced morphine consumption and pain severity with transdermal fentanyl patches following total knee arthroplasty	2014	< 30 per target group
Williams, B. A.; Kentor, M. L.; Vogt, M. T.; Irrgang, J. J.; Bottegal, M. T.; West, R. V.; Harner, C. D.; Fu, F. H.; Williams, J. P.	Reduction of verbal pain scores after anterior cruciate ligament reconstruction with 2-day continuous femoral nerve block: a randomized clinical trial	2006	irrelevant comparison: levobupivacaine vs placebo
Atchabahian, A.; Schwartz, G.; Hall, C. B.; Lajam, C. M.; Andrae, M. H.	Regional analgesia for improvement of long-term functional outcome after elective large joint replacement	2015	References Reviewed

Driscoll, E. B.; Maleki, A. H.; Jahromi, L.; Hermez, B. N.; Nelson, L. E.; Vetter, I. L.; Evenhuis, S.; Riesenber, L. A.	Regional anesthesia or patient-controlled analgesia and compartment syndrome in orthopedic surgical procedures: a systematic review	2016	References Reviewed
Arslan, M.; Canturk, M.; Ornek, D.; Gamli, M.; Pala, Y.; Dikmen, B.; Basaran, M.	Regional intravenous anesthesia in knee arthroscopy	2010	<30 pts per group
Ritcey, B.; Pageau, P.; Woo, M. Y.; Perry, J. J.	Regional Nerve Blocks For Hip and Femoral Neck Fractures in the Emergency Department: A Systematic Review	2016	References Reviewed
Srivastava, K.; Chaudhury, S.	Rehabilitation after amputation: psychotherapeutic intervention module in Indian scenario	2014	no outcomes interest; cognitive measures
Kim, J. G.; Lee, Y. S.; Yang, B. S.; Oh, S. J.; Yang, S. J.	Rehabilitation after posterior cruciate ligament reconstruction: a review of the literature and theoretical support	2013	References Reviewed
Lin, C. W.; Donkers, N. A.; Refshauge, K. M.; Beckenkamp, P. R.; Khera, K.; Moseley, A. M.	Rehabilitation for ankle fractures in adults	2012	References Reviewed
Handoll, H. H.; Elliott, J.	Rehabilitation for distal radial fractures in adults	2015	References Reviewed
Handoll, H. H.; Madhok, R.; Howe, T. E.	Rehabilitation for distal radial fractures in adults	2002	References Reviewed
De Carlo, M. S.; McDivitt, R.	Rehabilitation of Patients Following Autogenic Bone-Patellar Tendon-Bone ACL Reconstruction: A 20-Year Perspective	2006	review
Davila Castrodad, I. M.; Recai, T. M.; Abraham, M. M.; Etcheson, J. I.; Mohamed, N. S.; Edalatpour, A.; Delanois, R. E.	Rehabilitation protocols following total knee arthroplasty: a review of study designs and outcome measures	2019	References Reviewed
Huang, J.; Wang, C.; Ma, X.; Wang, X.; Zhang, C.; Chen, L.	Rehabilitation regimen after surgical treatment of acute Achilles tendon ruptures: a systematic review with meta-analysis	2015	References Reviewed
Biswas, A.; Perlas, A.; Ghosh, M.; Chin, K.; Niazi, A.; Pandher, B.; Chan, V.	Relative Contributions of Adductor Canal Block and Intrathecal Morphine to Analgesia and Functional Recovery After Total Knee Arthroplasty: A Randomized Controlled Trial	2018	irrelevant comparison; block vs block vs placebo
Tidermark, J.; Bergstrom, G.; Svensson, O.; Tornkvist, H.; Ponzer, S.	Responsiveness of the EuroQol (EQ 5-D) and the SF-36 in elderly patients with displaced femoral neck fractures	2003	irrelevant topic; fracture types
Yang, Y.; Zhao, X.; Dong, T.; Yang, Z.; Zhang, Q.; Zhang, Y.	Risk factors for postoperative delirium following hip fracture repair in elderly patients: a systematic review and meta-analysis	2017	References Reviewed



Raynauld, J. P.; Martel-Pelletier, J.; Haraoui, B.; Choquette, D.; Dorais, M.; Wildi, L. M.; Abram, F.; Pelletier, J. P.	Risk factors predictive of joint replacement in a 2-year multicentre clinical trial in knee osteoarthritis using MRI: results from over 6 years of observation	2011	irrelevant topic; Non-RCT
Bian, Y. Y.; Wang, L. C.; Qian, W. W.; Lin, J.; Jin, J.; Peng, H. M.; Weng, X. S.	Role of Parecoxib Sodium in the Multimodal Analgesia after Total Knee Arthroplasty: A Randomized Double-blinded Controlled Trial	2018	work group exclusion; intervention not used in US
Thomas, K.; Kendal, J. K.; Ono, Y.; Lo, I. K. Y.; Bois, A. J.	The Role of Partial Rotator Cuff Repairs in Patients With Massive Irreparable Tears Without Arthritis	2019	References Reviewed
Singh, P. M.; Borle, A.; Trikha, A.; Michos, L.; Sinha, A.; Goudra, B.	Role of Periarticular Liposomal Bupivacaine Infiltration in Patients Undergoing Total Knee Arthroplasty-A Meta-analysis of Comparative Trials	2017	References Reviewed
Zorrilla-Vaca, A.; Li, J.	The role of sciatic nerve block to complement femoral nerve block in total knee arthroplasty: a meta-analysis of randomized controlled trials	2018	References Reviewed
Azarmi, S.; Farsi, Z.	Roy's Adaptation Model-Guided Education and Promoting the Adaptation of Veterans With Lower Extremities Amputation	2015	treatment beyond 90 days from surgery
Jahr, J. S.; Breitmeyer, J. B.; Pan, C.; Royal, M. A.; Ang, R. Y.	Safety and efficacy of intravenous acetaminophen in the elderly after major orthopedic surgery: subset data analysis from 3, randomized, placebo-controlled trials	2012	sub-analysis of unpublished articles;
Karuppiyah, S. V.; Gibson, P.	The safety of hip injection with corticosteroid in the diagnosis and treatment of osteoarthritis	2007	irrelevant topic; Non-RCT
Wallace, D. F.; Emmett, S. R.; Kang, K. K.; Chahal, G. S.; Hiskens, R.; Balasubramanian, S.; McGuinness, K.; Parsons, H.; Achten, J.; Costa, M. L.	The safety of peri-articular local anaesthetic injection for patients undergoing total knee replacement with autologous blood transfusion: a randomised trial	2012	no outcomes of interest
Xue, D.; Zheng, Q.; Li, H.; Qian, S.; Zhang, B.; Pan, Z.	Selective COX-2 inhibitor versus nonselective COX-1 and COX-2 inhibitor in the prevention of heterotopic ossification after total hip arthroplasty: a meta-analysis of randomised trials	2011	References Reviewed
Zhu, X. T.; Chen, L.; Lin, J. H.	Selective COX-2 inhibitor versus non-selective COX-2 inhibitor for the prevention of heterotopic ossification after total hip arthroplasty: A meta-analysis	2018	References Reviewed
Valanne, J. V.; Korhonen, A. M.; Jokela, R. M.; Ravaska, P.; Korttila, K. K.	Selective spinal anesthesia: a comparison of hyperbaric bupivacaine 4 mg versus 6 mg for outpatient knee arthroscopy	2001	Irrelevant comparison; different anesthetic dose

Petersen, M. K.; Andersen, N. T.; Soballe, K.	Self-reported functional outcome after primary total hip replacement treated with two different perioperative regimes: a follow-up study involving 61 patients	2008	irrelevant comparison; optimized periop care vs conventional periop care
Dahl, V.; Spreng, U. J.; Waage, M.; Raeder, J. C.	Short stay and less pain after ambulatory anterior cruciate ligament (ACL) repair: COX-2 inhibitor versus glucocorticoid versus both combined	2012	irrelevant combination: NSAID + glucocorticoid
Murphy, R. J.; Carr, A. J.	Shoulder pain	2010	References Reviewed; Irrelevant topic; non-surgery
Derry, S.; Cooper, T. E.; Phillips, T.	Single fixed-dose oral dexketoprofen plus tramadol for acute postoperative pain in adults	2016	References Reviewed
Sites, B. D.; Beach, M.; Gallagher, J. D.; Jarrett, R. A.; Sparks, M. B.; Lundberg, C. J.	A single injection ultrasound-assisted femoral nerve block provides side effect-sparing analgesia when compared with intrathecal morphine in patients undergoing total knee arthroplasty	2004	published before 2010
Rodriguez-Merchan, E. C.	Single Local Infiltration Analgesia (LIA) Aids Early Pain Management After Total Knee Replacement (TKR): An Evidence-Based Review and Commentary	2018	References Reviewed
Adam, F.; Menigaux, C.; Sessler, D. I.; Chauvin, M.	A single preoperative dose of gabapentin (800 milligrams) does not augment postoperative analgesia in patients given interscalene brachial plexus blocks for arthroscopic shoulder surgery	2006	published before 2010
Zhang, L. K.; Zhang, B. Y.; Quan, R. F.; Xu, H.; Sun, Y. J.; Zhou, J. H.	Single shot versus continuous technique adductor canal block for analgesia following total knee arthroplasty: A PRISMA-compliant meta-analysis	2019	References Reviewed
Lee, C. H.; Lee, T. Y.; Her, J. S.; Liao, W. L.; Hsieh, C. L.	Single-Blinded, Randomized Preliminary Study Evaluating the Effect of Transcutaneous Electrical Nerve Stimulation on Postoperative Pain in Patients with Colles' Fracture	2015	< 30 per target group
Wang, Y. L.; Zeng, C.; Xie, D. X.; Yang, Y.; Wei, J.; Yang, T.; Li, H.; Lei, G. H.	Single-dose intra-articular bupivacaine plus morphine after knee arthroscopic surgery: a meta-analysis of randomised placebo-controlled studies	2015	References Reviewed
Wei, J.; Lei, G. H.; Gao, S. G.; Zeng, C.; Qin, J. B.; Kong, F. J.; Yang, T. B.	Single-dose intra-articular bupivacaine versus morphine after arthroscopic knee surgery: a meta-analysis of randomized-controlled studies	2014	References Reviewed
Xie, D. X.; Zeng, C.; Wang, Y. L.; Li, Y. S.; Wei, J.; Li, H.; Yang, T.; Yang, T. B.; Lei, G. H.	A Single-Dose Intra-Articular Morphine plus Bupivacaine versus Morphine Alone following Knee Arthroscopy: A Systematic Review and Meta-Analysis	2015	Irrelevant comparison; Morphine plus bupivacaine vs morphine alone
Zhou, Y.; Yang, T. B.; Wei, J.; Zeng, C.; Li, H.; Yang, T.; Lei, G. H.	Single-dose intra-articular ropivacaine after arthroscopic knee surgery decreases post-operative pain without increasing side effects: a systematic review and meta-analysis	2016	References Reviewed

Sean, V. W.; Chin, P. L.; Chia, S. L.; Yang, K. Y.; Lo, N. N.; Yeo, S. J.	Single-dose periarticular steroid infiltration for pain management in total knee arthroplasty: a prospective, double-blind, randomised controlled trial	2011	irrelevant comparison: periarticular injection vs control
Adam, F.; Chauvin, M.; Du Manoir, B.; Langlois, M.; Sessler, D. I.; Fletcher, D.	Small-dose ketamine infusion improves postoperative analgesia and rehabilitation after total knee arthroplasty	2005	<60 total pts
Himmelseher, S.; Ziegler-Pithamitsis, D.; Argiriadou, H.; Martin, J.; Jelen-Esselborn, S.; Kochs, E.	Small-dose S(+)-ketamine reduces postoperative pain when applied with ropivacaine in epidural anesthesia for total knee arthroplasty	2001	published before 2005
McNamee, D. A.; McClelland, A. M.; Scott, S.; Milligan, K. R.; Westman, L.; Gustafsson, U.	Spinal anaesthesia: comparison of plain ropivacaine 5 mg ml <sup>-1</sup> with bupivacaine 5 mg ml <sup>-1</sup> for major orthopaedic surgery	2002	irrelevant comparison: ropivacaine vs bupivacaine
Scoggin, J. F., 3rd; Mayfield, G.; Awaya, D. J.; Pi, M.; Prentiss, J.; Takahashi, J.	Subacromial and intra-articular morphine versus bupivacaine after shoulder arthroscopy	2002	published before 2010
Jove, M.; Griffin, D. W.; Minkowitz, H. S.; Ben-David, B.; Evashenk, M. A.; Palmer, P. P.	Sufentanil Sublingual Tablet System for the Management of Postoperative Pain after Knee or Hip Arthroplasty: A Randomized, Placebo-controlled Study	2015	irrelevant comparison; sufentanil vs. placebo
Melson, T. I.; Boyer, D. L.; Minkowitz, H. S.; Turan, A.; Chiang, Y. K.; Evashenk, M. A.; Palmer, P. P.	Sufentanil sublingual tablet system vs. intravenous patient-controlled analgesia with morphine for postoperative pain control: a randomized, active-comparator trial	2014	mixed population; 22% open abdominal
Hong, J. Y.; Lee, I. H.	Suprascapular nerve block or a piroxicam patch for shoulder tip pain after day case laparoscopic surgery	2003	irrelevant comparison; block vs patch
Kay, J.; Memon, M.; Hu, T.; Simunovic, N.; Duong, A.; Paul, J.; Athwal, G.; Ayeni, O. R.	Suprascapular Nerve Blockade for Postoperative Pain Control After Arthroscopic Shoulder Surgery: A Systematic Review and Meta-analysis	2018	References Reviewed
Monaghan, B.; Caulfield, B.; O'Mathuna, D. P.	Surface neuromuscular electrical stimulation for quadriceps strengthening pre and post total knee replacement	2010	References Reviewed
Zhang, A. H.; Chen, X.; Zhao, Q. X.; Wang, K. L.	A systematic review and meta-analysis of naproxen for prevention heterotopic ossification after hip surgery	2019	References Reviewed
Beckwee, D.; Bautmans, I.; Swinnen, E.; Vermet, Y.; Lefeber, N.; Lievens, P.; Vaes, P.	A systematic review investigating the relationship between efficacy and stimulation parameters when using transcutaneous electrical nerve stimulation after knee arthroplasty	2014	References Reviewed

Wright, R. W.; Preston, E.; Fleming, B. C.; Amendola, A.; Andrish, J. T.; Bergfeld, J. A.; Dunn, W. R.; Kaeding, C.; Kuhn, J. E.; Marx, R. G.; McCarty, E. C.; Parker, R. C.; Spindler, K. P.; Wolcott, M.; Wolf, B. R.; Williams, G. N.	A systematic review of anterior cruciate ligament reconstruction rehabilitation: part II: open versus closed kinetic chain exercises, neuromuscular electrical stimulation, accelerated rehabilitation, and miscellaneous topics	2008	References Reviewed
Dickinson, R. N.; Kuhn, J. E.; Bergner, J. L.; Rizzone, K. H.	A systematic review of cost-effective treatment of postoperative rotator cuff repairs	2017	References Reviewed
Koehler, R. M.; Okoroafor, U. C.; Cannada, L. K.	A systematic review of opioid use after extremity trauma in orthopedic surgery	2018	References Reviewed
Bay, S.; Kuster, L.; McLean, N.; Byrnes, M.; Kuster, M. S.	A systematic review of psychological interventions in total hip and knee arthroplasty	2018	References Reviewed
Nair, G. S.; Abrishami, A.; Lermitte, J.; Chung, F.	Systematic review of spinal anaesthesia using bupivacaine for ambulatory knee arthroscopy	2009	References Reviewed
Ezendam, D.; Bongers, R. M.; Jannink, M. J.	Systematic review of the effectiveness of mirror therapy in upper extremity function	2009	References Reviewed
Yue, C.; Zhang, X.; Zhu, Y.; Jia, Y.; Wang, H.; Liu, Y.	Systematic Review of Three Electrical Stimulation Techniques for Rehabilitation After Total Knee Arthroplasty	2018	References Reviewed
Mundi, S.; Chaudhry, H.; Bhandari, M.	Systematic review on the inclusion of patients with cognitive impairment in hip fracture trials: a missed opportunity?	2014	irrelevant topic; trial inclusions, References reviewed
Zheng, H.; Rosal, M. C.; Oatis, C. A.; Li, W.; Franklin, P. D.	Tailored system to deliver behavioral intervention and manage data in randomized trials	2013	Non-RCT
Viscusi, E. R.; Allard, R.; Sohns, M.; Eerdeken, M.	Tapentadol immediate release for moderate to severe acute post-surgery pain	2019	irrelevant comparison: different doses
Monticone, M.; Ambrosini, E.; Rocca, B.; Lorenzon, C.; Ferrante, S.; Zatti, G.	Task-oriented exercises and early full weight-bearing contribute to improving disability after total hip replacement: a randomized controlled trial	2014	irrelevant comparison; accelerated vs traditional weightbearing rehab; starts same time/not early
Santavirta, N.; Lillqvist, G.; Sarvimaki, A.; Honkanen, V.; Konttinen, Y. T.; Santavirta, S.	Teaching of patients undergoing total hip replacement surgery	1994	<30 Pts per group
Xie, Z.; Hussain, W.; Cutter, T. W.; Apfelbaum, J. L.; Drum, M. L.; Manning, D. W.	Three-in-one nerve block with different concentrations of bupivacaine in total knee arthroplasty: randomized, placebo-controlled, double-blind trial	2012	irrelevant comparison: different doses vs placebo

Laoruengthana, A.; Jarusriwanna, A.; Rattanaprichavej, P.; Rasamimongkol, S.; Varakornpipat, P.; Pongpirul, K.	Timing of periarticular injection has no effect on postoperative pain and functional recovery in simultaneous bilateral total knee arthroplasty: a prospective randomized, double-blinded trial	2019	irrelevant comparison: periarticular injection at different time frames
Maniar, R. N.; Baviskar, J. V.; Singhi, T.; Rath, S. S.	To use or not to use continuous passive motion post-total knee arthroplasty presenting functional assessment results in early recovery	2012	< 30 per target group
McNamee, D. A.; Convery, P. N.; Milligan, K. R.	Total knee replacement: a comparison of ropivacaine and bupivacaine in combined femoral and sciatic block	2001	irrelevant comparison: bupivacaine vs ropivacaine vs control
Rothgangel, A.; Braun, S.; Winkens, B.; Beurskens, A.; Smeets, R.	Traditional and augmented reality mirror therapy for patients with chronic phantom limb pain (PACT study): results of a three-group, multicentre single-blind randomized controlled trial	2018	<30 pts per group
Wang, H. P.; Liang, J.; Kuo, L. M.; Chen, C. Y.; Shyu, Y. I.	Trajectories of Nutritional Status and Cognitive Impairment among Older Taiwanese with Hip Fracture	2017	No outcomes of interest
Mannion, S.; O'Callaghan, S.; Murphy, D. B.; Shorten, G. D.	Tramadol as adjunct to psoas compartment block with levobupivacaine 0.5%: a randomized double-blinded study	2005	< 30 per target group
Morgan, B.; Jones, A. R.; Mulcahy, K. A.; Finlay, D. B.; Collett, B.	Transcutaneous electric nerve stimulation (TENS) during distension shoulder arthrography: a controlled trial	1996	<30 pts per group
Mulvey, M. R.; Bagnall, A. M.; Johnson, M. I.; Marchant, P. R.	Transcutaneous electrical nerve stimulation (TENS) for phantom pain and stump pain following amputation in adults	2010	References Reviewed
Li, J.; Song, Y.	Transcutaneous electrical nerve stimulation for postoperative pain control after total knee arthroplasty: A meta-analysis of randomized controlled trials	2017	References Reviewed
Breit, R.; Van der Wall, H.	Transcutaneous electrical nerve stimulation for postoperative pain relief after total knee arthroplasty	2004	< 30 per target group
Sathitkarnmanee, T.; Tribuddharat, S.; Noiphitak, K.; Theerapongpakdee, S.; Pongjanyakul, S.; Huntula, Y.; Thananun, M.	Transdermal fentanyl patch for postoperative analgesia in total knee arthroplasty: a randomized double-blind controlled trial	2014	< 60 total pts
Matsumoto, S.; Matsumoto, K.; Iida, H.	Transdermal fentanyl patch improves post-operative pain relief and promotes early functional recovery in patients undergoing primary total knee arthroplasty: a prospective, randomised, controlled trial	2015	< 60 total pts

Romeo, R.; Knapp, M.; Banerjee, S.; Morris, J.; Baldwin, R.; Tarrier, N.; Pendleton, N.; Horan, M.; Burns, A.	Treatment and prevention of depression after surgery for hip fracture in older people: cost-effectiveness analysis	2011	No outcomes of interest
Burns, A.; Banerjee, S.; Morris, J.; Woodward, Y.; Baldwin, R.; Proctor, R.; Tarrier, N.; Pendleton, N.; Sutherland, D.; Andrew, G.; Horan, M.	Treatment and prevention of depression after surgery for hip fracture in older people: randomized, controlled trials	2007	irrelevant topic; multidisciplinary geriatric program
Beynnon, B. D.; Johnson, R. J.; Abate, J. A.; Fleming, B. C.; Nichols, C. E.	Treatment of anterior cruciate ligament injuries, part I	2005	irrelevant topic; surgical method
Itoh, S.; Ohta, T.; Sekino, Y.; Yukawa, Y.; Shinomiya, K.	Treatment of distal radius fractures with a wrist-bridging external fixation: the value of alternating electric current stimulation	2008	< 60 total pts
Bleyenheuft, C.; Bleyenheuft, Y.; Hanson, P.; Deltombe, T.	Treatment of genu recurvatum in hemiparetic adult patients: a systematic literature review	2010	Irrelevant topic; non-surgery, References reviewed
Hernandez-Vaquero, D.; Fernandez-Fairen, M.; Torres, A.; Menzie, A. M.; Fernandez-Carreira, J. M.; Murcia-Mazon, A.; Guerado, E.; Merzthal, L.	Treatment of periprosthetic infections: an economic analysis	2013	irrelevant topic; periprosthetic infections
Dong, W.; Goost, H.; Lin, X. B.; Burger, C.; Paul, C.; Wang, Z. L.; Zhang, T. Y.; Jiang, Z. C.; Welle, K.; Kabir, K.	Treatments for shoulder impingement syndrome: a PRISMA systematic review and network meta-analysis	2015	References Reviewed
Dolan, J.; Williams, A.; Murney, E.; Smith, M.; Kenny, G. N.	Ultrasound guided fascia iliaca block: a comparison with the loss of resistance technique	2008	irrelevant comparison; block vs block (different route)
Bhayana, H.; Mishra, P.; Tandon, A.; Pankaj, A.; Pandey, R.; Malhotra, R.	Ultrasound guided versus landmark guided corticosteroid injection in patients with rotator cuff syndrome: Randomised controlled trial	2018	irrelevant comparison: landmark guided vs ultrasound
Cicekci, F.; Yildirim, A.; Onal, O.; Celik, J. B.; Kara, I.	Ultrasound-guided adductor canal block using levobupivacaine versus periarticular levobupivacaine infiltration after totalknee arthroplasty: a randomized clinical trial	2019	repeat of 20498
Ota, J.; Sakura, S.; Hara, K.; Saito, Y.	Ultrasound-guided anterior approach to sciatic nerve block: a comparison with the posterior approach	2009	irrelevant comparison; block vs block

O'Donnell, B. D.; Ryan, H.; O'Sullivan, O.; Iohom, G.	Ultrasound-guided axillary brachial plexus block with 20 milliliters local anesthetic mixture versus general anesthesia for upper limb trauma surgery: an observer-blinded, prospective, randomized, controlled trial	2009	published before 2010
Ma, Y.; Wu, J.; Xue, J.; Lan, F.; Wang, T.	Ultrasound-guided continuous fascia iliaca compartment block for pre-operative pain control in very elderly patients with hip fracture: A randomized controlled trial	2018	irrelevant comparison: block vs control
Yu, B.; He, M.; Cai, G. Y.; Zou, T. X.; Zhang, N.	Ultrasound-guided continuous femoral nerve block vs continuous fascia iliaca compartment block for hip replacement in the elderly: A randomized controlled clinical trial (CONSORT)	2016	irrelevant comparison; block vs block
Rahimzadeh, P.; Imani, F.; Sayarifard, A.; Sayarifard, S.; Faiz, S. H.	Ultrasound-guided fascia iliaca compartment block in orthopedic fractures: Bupivacaine 0.2% or 0.3%?	2016	irrelevant comparison: different doses 0.2 % vs 0.3%
Wiesmann, T.; Huttemann, I.; Schilke, N.; Heyse, T.; Efe, T.; Eschbach, D.; Wulf, H.; Steinfeldt, T.; Feldmann, C.	Ultrasound-guided single injection versus continuous sciatic nerve blockade on pain management and mobilisation after total knee arthroplasty (CoSinUS trial): A randomised, triple-blinded controlled trial	2018	irrelevant comparison; block vs block
Fanelli, G.; Borghi, B.; Casati, A.; Bertini, L.; Montebugnoli, M.; Torri, G.	Unilateral bupivacaine spinal anesthesia for outpatient knee arthroscopy. Italian Study Group on Unilateral Spinal Anesthesia	2000	irrelevant comparison: uni vs bilateral spinal block
Breebaart, M. B.; Vercauteren, M. P.; Hoffmann, V. L.; Adriaensen, H. A.	Urinary bladder scanning after day-case arthroscopy under spinal anaesthesia: comparison between lidocaine, ropivacaine, and levobupivacaine	2003	confounding; 3 different local anesthetics and different doses
Jack, N. T.; Liem, E. B.; Vonhogen, L. H.	Use of a stimulating catheter for total knee replacement surgery: preliminary results	2005	non-RCT
Caceres-Sanchez, L.; Garcia-Benitez, J. B.; Coronado-Hijon, V.; Montero-Pariente, M.	The use of an intraarticular catheter on fast-track primary knee arthroplasty, is it a step forward?	2018	irrelevant comparison; regional vs. regional
Konrath, G. A.; Lock, T.; Goitz, H. T.; Scheidler, J.	The use of cold therapy after anterior cruciate ligament reconstruction. A prospective, randomized study and literature review	1996	<30 pts per group
Lin, S.; Xie, J.; Yao, X.; Dai, Z.; Wu, W.	The Use of Cryotherapy for the Prevention of Wound Complications in the Treatment of Calcaneal Fractures	2018	non-RCT
Clarkson, R.; Mahmoud, S. S. S.; Rangan, A.; Eardley, W.; Baker, P.	The use of foot pumps compression devices in the perioperative management of ankle fractures: Systematic review of the current literature	2017	References Reviewed

Han, C.; Li, X. D.; Jiang, H. Q.; Ma, J. X.; Ma, X. L.	The use of gabapentin in the management of postoperative pain after total hip arthroplasty: a meta-analysis of randomised controlled trials	2016	References Reviewed
Han, C.; Li, X. D.; Jiang, H. Q.; Ma, J. X.; Ma, X. L.	The use of gabapentin in the management of postoperative pain after total knee arthroplasty: A PRISMA-compliant meta-analysis of randomized controlled trials	2016	References Reviewed
Alkire, M. R.; Swank, M. L.	Use of inpatient continuous passive motion versus no CPM in computer-assisted total knee arthroplasty	2010	irrelevant comparison; CPM vs. PT regular course
Alagol, A.; Calpur, O. U.; Kaya, G.; Pamukcu, Z.; Turan, F. N.	The use of intraarticular tramadol for postoperative analgesia after arthroscopic knee surgery: a comparison of different intraarticular and intravenous doses	2004	published before 2010
Wozniak-Czekierda, W.; Wozniak, K.; Hadamus, A.; Bialoszewski, D.	Use of Kinesiology Taping in Rehabilitation after Knee Arthroplasty: a Randomised Clinical Study	2017	irrelevant topic; KT taping
Davidovitch, R.; Goch, A.; Driesman, A.; Konda, S.; Pean, C.; Egol, K.	The Use of Liposomal Bupivacaine Administered With Standard Bupivacaine in Ankle Fractures Requiring Open Reduction Internal Fixation: A Single-Blinded Randomized Controlled Trial	2017	irrelevant comparison: local vs local anesthesia
Pellino, T. A.; Gordon, D. B.; Engelke, Z. K.; Busse, K. L.; Collins, M. A.; Silver, C. E.; Norcross, N. J.	Use of nonpharmacologic interventions for pain and anxiety after total hip and total knee arthroplasty	2005	irrelevant comparison: pharma vs non pharma
Song, B.; Yang, Y.; Teng, X.; Li, Y.; Bai, W.; Zhu, J.	Use of pre-operative anxiety score to determine the precise dose of butorphanol for intra-operative sedation under regional anesthesia: A double-blinded randomized trial	2019	irrelevant comparison; opioid vs placebo
van Haelst, I. M.; Egberts, T. C.; Doodeman, H. J.; Traast, H. S.; Burger, B. J.; Kalkman, C. J.; van Kleij, W. A.	Use of serotonergic antidepressants and bleeding risk in orthopedic patients	2010	non-RCT
Eschalier, B.; Descamps, S.; Boisgard, S.; Pereira, B.; Lefevre-Colau, M. M.; Claus, D.; Coudeyre, E.	Validation of an educational booklet targeted to patients candidate for total knee arthroplasty	2013	references reviewed
Smeeing, D. P.; Houwert, R. M.; Briet, J. P.; Kelder, J. C.; Segers, M. J.; Verleisdonk, E. J.; Leenen, L. P.; Hietbrink, F.	Weight-bearing and mobilization in the postoperative care of ankle fractures: a systematic review and meta-analysis of randomized controlled trials and cohort studies	2015	references reviewed
	Weight-bearing in ankle fractures: An audit of UK practice	2019	irrelevant topic; audit



VanderHave, K. L.; Perkins, C.; Le, M.	Weightbearing Versus Nonweightbearing After Meniscus Repair	2015	references reviewed
Smith, T. O.; Davies, L.	When Should Open Reduction and Internal Fixation Ankle Fractures Begin Weight Bearing? A Systematic Review	2008	references reviewed
McDonald, E. L.; Daniel, J. N.; Rogero, R. G.; Shakked, R. J.; Nicholson, K.; Pedowitz, D. I.; Raikin, S. M.; Bilolikar, V.; Winters, B. S.	How Does Perioperative Ketorolac Affect Opioid Consumption and Pain Management After Ankle Fracture Surgery?	2020	Repeat of 61
Chuan, A.; Zhao, L.; Tillekeratne, N.; Alani, S.; Middleton, P. M.; Harris, I. A.; McEvoy, L.; NÃ ChrÃ³inÃ n D	The effect of a multidisciplinary care bundle on the incidence of delirium after hip fracture surgery: a quality improvement study	2020	No outcomes of interest
Gilmore, C. A.; Ilfeld, B. M.; Rosenow, J. M.; Li, S.; Desai, M. J.; Hunter, C. W.; Rauck, R. L.; Nader, A.; Mak, J.; Cohen, S. P.; Crosby, N. D.; Boggs, J. W.	Percutaneous 60-day peripheral nerve stimulation implant provides sustained relief of chronic pain following amputation: 12-month follow-up of a randomized, double-blind, placebo-controlled trial	2020	< 60 total pts
Puzzitiello, R. N.; Patel, B. H.; Nwachukwu, B. U.; Allen, A. A.; Forsythe, B.; Salzler, M. J.	Adverse impact of corticosteroid injection on rotator cuff tendon health and repair: A systematic review	2019	references reviewed
Edwards, M. D.; Bethea, J. P.; Hunnicutt, J. L.; Slone, H. S.; Woolf, S. K.	Effect of Adductor Canal Block Versus Femoral Nerve Block on Quadriceps Strength, Function, and Postoperative Pain After Anterior Cruciate Ligament Reconstruction: A Systematic Review of Level 1 Studies	2019	irrelevant comparison; block vs block
Ma, T.; Liu, Q.; Zhou, L.; Yue, K.; Ding, Z.; Chen, B.	Continuous nerve block versus single-shot nerve block for total knee arthroplasty: a meta-analysis from randomised controlled trials	2019	irrelevant comparison; block vs block
Whale, K.; Wylde, V.; Beswick, A.; Rathbone, J.; Vedhara, K.; Goberman-Hill, R.	Effectiveness and reporting standards of psychological interventions for improving short-Term and long-Term pain outcomes after total knee replacement: A systematic review	2019	references reviewed
Akhondzadeh, R.; Rashidi, M.; Gousheh, M.; Olapour, A.; Tasbihi, B.	Comparison of the ketamine-lidocaine and fentanyl-lidocaine in postoperative analgesia in axillary block in upper limb fractures by ultrasound guidance	2019	work group exclusion; comparison not of interest
Hasebroock, A. W.; Brinkman, J.; Foster, L.; Bowens, J. P.	Management of primary anterior shoulder dislocations: a narrative review	2019	references reviewed

Liu, Y.; Zeng, J. F.; Zeng, Y.; Wu, Y. G.; Bao, X. C.; Shen, B.	Comprehensive Comparison of Liposomal Bupivacaine with Femoral Nerve Block for Pain Control Following Total Knee Arthroplasty: An Updated Systematic Review and Meta-Analysis	2019	references reviewed
Zhang, L. K.; Li, Q.; Zhu, F. B.; Liu, J. S.; Zhang, Z. J.; Zhang, Y. H.; Quan, R. F.	Comparison of adductor canal block with periarticular infiltration analgesia in total knee arthroplasty: A meta-analysis of randomized controlled trials	2019	references reviewed
Atabaki, S.; Farahani, M. A.; Haghani, S.	Effect of rehabilitation education on pain, knee stiffness and performance difficulty in patients undergoing knee replacement surgery: A randomized clinical trial	2019	work group exclusion; only female population
Xiao, K.; Yu, L.; Xiao, W.; Peng, H.; Bian, Y.; Wu, Z.; Weng, X.	Pain management using perioperative administration of parecoxib for total hip arthroplasty: A randomized, double-blind, placebo-controlled trial	2019	work group exclusion; intervention not used in US
Bergese, S. D.; Melson, T. I.; Candiotti, K. A.; Ayad, S. S.; Mack, R. J.; McCallum, S. W.; Du, W.; Gomez, A.; Marcet, J. E.	A Phase 3, Randomized, Placebo-Controlled Evaluation of the Safety of Intravenous Meloxicam Following Major Surgery	2019	mixed population; ~45% non-ortho surgery
Zhang, Z.; Wang, Y.; Liu, Y.	Effectiveness of continuous adductor canal block versus continuous femoral nerve block in patients with total knee arthroplasty: A PRISMA guided systematic review and meta-analysis	2019	irrelevant comparison; block vs block
Bednarski, P.; Kiwerski, J.	Evaluation of Local Cryotherapy after Anterior Cruciate Ligament Reconstruction. Critical Review of the Literature	2019	References Reviewed
McDonall, J.; De Steiger, R.; Reynolds, J.; Redley, B.; Livingston, P. M.; Hutchinson, A. F.; Botti, M.	Patient activation intervention to facilitate participation in recovery after total knee replacement (MIME): A cluster randomised cross-over trial	2019	irrelevant topic; patient and physician guided education to increase therapy participation
Levene, J. L.; Weinstein, E. J.; Cohen, M. S.; Andreae, D. A.; Chao, J. Y.; Johnson, M.; Hall, C. B.; Andreae, M. H.	Local anesthetics and regional anesthesia versus conventional analgesia for preventing persistent postoperative pain in adults and children: A Cochrane systematic review and meta-analysis update	2019	References Reviewed
Soulioti, E.; Tsaroucha, A.; Makris, A.; Koutsaki, M.; Sklika, E.; Mela, A.; Megaloikonomos, P. D.; Mavrogenis, A. F.; Fassoulaki, A.	Addition of 100 mg of Tramadol to 40 mL of 0.5% Ropivacaine for Interscalene Brachial Plexus Block Improves Postoperative Analgesia in Patients Undergoing Shoulder Surgeries as Compared to Ropivacaine Alone-A Randomized Controlled Study	2019	irrelevant comparison; tramadol vs. placebo
Haykal, T.; Kheiri, B.; Zayed, Y.; Barbarawi, M.; Miran, M. S.;	Erratum to "Aspirin for venous thromboembolism prophylaxis after hip or knee arthroplasty: An updated meta-analysis of randomized controlled trials" [J. Orthop. 16 (2019) 312-319]	2019	erratum

Chahine, A.; Katato, K.; Bachuwa, G.			
Taherâ?čekBaneh, N.; Ghadamie, N.; Sarshivi, F.; Sahraie, R.; Nasseri, K.	Comparison of fentanyl and dexmedetomidine as an adjuvant to bupivacaine for unilateral spinal anesthesia in lower limb surgery: a randomized trial	2019	not published in English
Soffin, E. M.; Gibbons, M. M.; Wick, E. C.; Kates, S. L.; Cannesson, M.; Scott, M. J.; Grant, M. C.; Ko, S. S.; Wu, C. L.	Evidence Review Conducted for the Agency for Healthcare Research and Quality Safety Program for Improving Surgical Care and Recovery: Focus on Anesthesiology for Hip Fracture Surgery	2019	Review
Cooper, A. L.; Nagree, Y.; Goudie, A.; Watson, P. R.; Arendts, G.	Ultrasound-guided femoral nerve blocks are not superior to ultrasound-guided fascia iliaca blocks for fractured neck of femur	2019	irrelevant comparison; block vs block
Seangleulur, A.; Manuwong, S.; Chernchujit, B.; Worathongchai, S.; Sorin, T.	Comparison of post-operative analgesia between adductor canal block and femoral nerve block after arthroscopic anterior cruciate ligament reconstruction: A randomized controlled trial	2019	irrelevant comparison; block vs block
Bombardieri, A. M.; Maalouf, D. B.; Kahn, R. L.; Ma, Y.; Bae, J. J.; Wukovits, B.; Lee, A.; Jules-Elysee, K. M.; de Gaudio, A. R.; Liguori, G. A.	A comparison of two different concentrations and infusion rates of ropivacaine in perineural infusion administered at the same total dose for analgesia after foot and ankle surgery: A randomized, double blinded, controlled study	2019	irrelevant comparison; block vs. block
Zhang, X.; Dong, Q.; Fang, J.	Impacts of general and spinal anaesthesia on short-term cognitive function and mental status in elderly patients undergoing orthopaedic surgery	2019	irrelevant comparison; block vs general
Badhe, V. K.; Swami, N. R.; Gore, S. K.; Badhe, V. K.; Vinayak, S. R.	Comparative study of efficacy of intrathecal tramadol added to bupivacaine in prevention of intraoperative shivering	2019	irrelevant comparison: tramadol vs placebo
Liu, M.; Zhang, D.; Shi, B.	Comparison of the post-total knee arthroplasty analgesic effect of intraoperative periarticular injection of different analgesics	2019	confounding treatment; different regional anesthesia and different drug doses
Cho, N.; Kang, R. S.; McCartney, C. J. L.; Pawa, A.; Costache, I.; Rose, P.; Abdallah, F. W.	Analgesic benefits and clinical role of the posterior suprascapular nerve block in shoulder surgery: a systematic review, meta-analysis and trial sequential analysis	2019	References Reviewed
Zhu, Q.; Jiang, Y.; Wang, H.; He, Y.	Comparison of intra-articular injection and arthroscopic capsular release in stages I and II of primary frozen shoulder, a randomized clinical trial	2019	irrelevant comparison; steroid injection vs. arthroscopic treatment

Huong, Q. B. T.; Luu, H. T.; Thanh, T. V.	Local infiltration analgesia with bupivacaine reduces postoperative pain and opioid consumption after joint replacements in a Vietnamese Hospital	2019	irrelevant comparison: local infiltration vs control
Calderín-Ochoa, F.; Oliveros, A. M.; Plata, G. R.; Quiñones, I. P.	Effectiveness and safety of exclusive spinal anesthesia with bupivacaine versus femoral sciatic block during the postoperative period of patients having undergone knee arthroscopy: Systematic review	2019	irrelevant comparison; regional vs regional anesthesia
Birch, S.; Stilling, M.; Mechlenburg, I.; Hansen, T. B.	No effect of cognitive behavioral patient education for patients with pain catastrophizing before total knee arthroplasty: a randomized controlled trial	2019	< 30 per target group
Diaz-Abele, J.; Luc, M.; Dyachenko, A.; Aldekhayel, S.; Ciampi, A.; McCusker, J.	Lidocaine With Epinephrine Versus Bupivacaine With Epinephrine as Local Anesthetic Agents in Wide-Awake Hand Surgery: A Pilot Outcome Study of Patient's Pain Perception	2019	irrelevant topic: neurological surgery - carpal tunnel
Duchman, K. R.; Lemmex, D. B.; Patel, S. H.; Ledbetter, L.; Garrigues, G. E.; Riboh, J. C.	The Effect of Non-Steroidal Anti-Inflammatory Drugs on Tendon-to-Bone Healing: A Systematic Review with Subgroup Meta-Analysis	2019	references reviewed
Jordan, R. W.; Kelly, C. P.	Management of glenohumeral arthritis in the young patient â?? A systematic review	2019	References Reviewed
Dale, E. L.; Kluemper, C. T.; Cowart, S. J.; Jemison, M.; Kennedy, J. W.; Gao, L.; Brzezienski, M. A.; Rehm, J.	Bupivacaine Extended-Release Liposomal Injection Versus Bupivacaine HCl for Early Postoperative Pain Control Following Wrist Operations: A Prospective, Randomized Control Trial	2019	irrelevant comparison; local vs. local
Zhang, X.; Shi, S.; Wang, T.; Di, W.; Fan, L.; Yang, Y.; Qian, Y.	Impact of preoperative intramuscular injection of nalbuphine on postoperative pain in elderly patients received arthroplasty	2019	irrelevant comparison: opioid vs control
Yu, X.; Luo, Y.; Wei, W.	Effects of nursing care based on positive suggestions on perioperative negative emotion and postoperative quality of life in orthopedic patients	2019	work group exclusion; Not intervention of interest
O'Donnell, C. M.; Black, N.; McCourt, K. C.; McBrien, M. E.; Clarke, M.; Patterson, C. C.; Blackwood, B.; McAuley, D. F.; Shields, M. O.	Development of a Core Outcome Set for studies evaluating the effects of anaesthesia on perioperative morbidity and mortality following hip fracture surgery	2019	references reviewed
PerÅjec, J.; Å eriÄ?, M.	Regional analgesia modalities in abdominal and lower limb surgery â?? comparison of efficacy	2019	review
Zhao, F. Y.; Zhang, Z. Y.; Zhao, Y. X.; Yan, H. X.; Hong, Y. F.; Xia, X. J.; Xu, H.	The effect of electroacupuncture preconditioning on cognitive impairments following knee replacement among elderly: A randomized controlled trial	2018	Irrelevant outcomes: postop cognitive dysfunction and other cognitive impairments
Hall, N.; Eldabe, S.	Phantom limb pain: a review of pharmacological management	2018	references reviewed

Bridges, M.; Hilliard, J.; Chui, K.	Management of Conditions Associated with Aging and Older Adults Using Therapeutic Electromagnetic Energy: A Narrative Systematic Review	2018	irrelevant topic; magnetic pulse
Shenoy, U.; Peter, V.; Mathew, P.; Thomas, T.	Transversus abdominis plane block supplementation during iliac crest bone graft harvesting - Effect on postoperative pain	2018	pediatric; mean age is 10
Elmallah, R. K.; Chughtai, M.; Khlopas, A.; Newman, J. M.; Stearns, K. L.; Roche, M.; Kelly, M. A.; Harwin, S. F.; Mont, M. A.	Pain Control in Total Knee Arthroplasty	2018	References Reviewed
Curry, A. L.; Goehring, M. T.; Bell, J.; Jette, D. U.	Effect of Physical Therapy Interventions in the Acute Care Setting on Function, Activity, and Participation after Total Knee Arthroplasty: A Systematic Review	2018	references reviewed
Culliton, S. E.; Bryant, D. M.; MacDonald, S. J.; Hibbert, K. M.; Chesworth, B. M.	Effect of an e-Learning Tool on Expectations and Satisfaction Following Total Knee Arthroplasty: A Randomized Controlled Trial	2018	irrelevant topic; pre-admission education; not periop window
Cho, E.; Kim, D. H.; Shin, S.; Kim, S. H.; Oh, Y. J.; Choi, Y. S.	Efficacy of palonosetron + Dexamethasone combination versus palonosetron alone for preventing nausea and vomiting related to opioid-based analgesia: A prospective, randomized, double-blind trial	2018	irrelevant comparison; antiemetic-steroid combo vs control
Wouters, R. M.; Tsehaie, J.; Hovius, S. E. R.; Dilek, B.; Selles, R. W.	Postoperative Rehabilitation Following Thumb Base Surgery: A Systematic Review of the Literature	2018	references reviewed
Xia, Z. N.; Zhou, Q.; Zhu, W.; Weng, X. S.	Low molecular weight heparin for the prevention of deep venous thrombosis after total knee arthroplasty: A systematic review and meta-analysis	2018	irrelevant topic; heparin
O'Donnell, C. M.; McLoughlin, L.; Patterson, C. C.; Clarke, M.; McCourt, K. C.; McBrien, M. E.; McAuley, D. F.; Shields, M. O.	Corrigendum to "Perioperative outcomes in the context of mode of anaesthesia for patients undergoing hip fracture surgery: systematic review and meta-analysis" [Br J Anaesth 2018; 120: 37-50](S0007091217539380)(10.1016/j.bja.2017.09.002)	2018	Corrigendum
Xue, Y.; Sun, Z.; Hu, P.; Wang, F.; Zuo, L.; Chen, Y.	Effect of a comprehensive rehabilitation nursing program on patients undergoing elbow arthrolysis	2018	irrelevant topic; multimodal nurse centered rehab program
Åyluk, A.; Puchalski, P.	Effectiveness of complex regional pain syndrome treatment: A systematic review	2018	references reviewed
Kelly, J. D.	CORR Insights®: Does a Brief Mindfulness Exercise Improve Outcomes in Upper Extremity Patients? A Randomized Controlled Trial	2018	review
Vorobeichik, L.; Brull, R.; Bowry, R.; Laffey, J. G.; Abdallah, F. W.	Should continuous rather than single-injection interscalene block be routinely offered for major shoulder surgery? A meta-analysis of the analgesic and side-effects profiles	2018	references reviewed

	Erratum: Effect of periopera-tive gabapentin on postoperative pain resolution and opioid cessation in a mixed surgical cohort: A randomized clinical trial (JAMA Surgery (2017) DOI: 10.1001/jamasurg.2017.4915)	2018	erratum
Tamilselvan, T.; Kalaivani, H.	A clinical study on management of post-operative pain and quality of life of osteoarthritis patients after total knee arthroplasty	2018	work group exclusion; unclear outcome measurements
Al Zahrani, T.; Ahmad, A. E.; Al-Ahaideb, A.; Algarni, A.; Nasser, A. B.; Alharbi, A.	Interscalene brachial plexus analgesia following arthroscopic shoulder surgery: Pharmacodynamics of bupivacaine bolus injection at different time intervals	2018	irrelevant comparison; same injection at three different times
Collocott, S. J. F.; Kelly, E.; Ellis, R. F.	Optimal early active mobilisation protocol after extensor tendon repairs in zones V and VI: A systematic review of literature	2018	references reviewed
Hussain, S.; Mahmood, T.; Buzdar, M. I.; Mustafa, M. I.	Outcome of manipulation under Anesthesia in treatment of frozen shoulder with and without steroid injection in terms of range of motion	2018	irrelevant topic; intra-articular injection vs. control
Corman, S.; Shah, N.; Dagenais, S.	Medication, equipment, and supply costs for common interventions providing extended post-surgical analgesia following total knee arthroplasty in US hospitals	2018	Extracted
Arya, K. N.; Pandian, S.; Vikas,; Puri, V.	Rehabilitation methods for reducing shoulder subluxation in post-stroke hemiparesis: a systematic review*	2018	non-orthopedic
Oseka, L.; Pecka, S.	Anesthetic management in early recovery after surgery protocols for total knee and total hip arthroplasty	2018	references reviewed
Li, J.; Li, G.; Li, X.; Yuan, L.; Sun, C. M.	The clinical effect and safety analysis of dezocine combined with low concentration ropivacaine in upper limb surgeries	2018	irrelevant comparison; opioid vs control
YaDeau, J. T.; Fields, K. G.; Kahn, R. L.; LaSala, V. R.; Ellis, S. J.; Levine, D. S.; Paroli, L.; Luu, T. H.; Roberts, M. M.	Readiness for discharge after foot and ankle surgery using peripheral nerve blocks: A randomized controlled trial comparing spinal and general anesthesia as supplements to nerve blocks	2018	irrelevant comparison: spinal vs GA
Sheehan, K. J.; Williamson, L.; Alexander, J.; Filliter, C.; Sobolev, B.; Guy, P.; Bearne, L. M.; Sackley, C.	Prognostic factors of functional outcome after hip fracture surgery: A systematic review	2018	references reviewed
Soleimanha, M.; Salari, A.; Khosousi, D.; Karimi, A.; Hemmati, M.	Comparison of the anxiety and satisfaction level of the patients under fracture plating treatment type c1 and c2 of distal femur in the two groups of combination drugs (Gabapentin, celecoxib, and acetaminophen) and placebo	2018	irrelevant comparison; NSAID + pregab + aceta combo vs placebo

Bhatt, K. A.; Prajapati, I. A.	A comparison between intrathecal isobaric levobupivacaine 0.5% and isobaric ropivacaine 0.5% in lower limb surgeries: a prospective, randomized, double blind study	2018	irrelevant comparison; intrathecal vs. intrathecal
Paul, J. A.; Rosenblatt, M. A.	Comparison of continuous adductor canal catheters and single-shot peripheral nerve blocks providing analgesia after unicondylar knee replacement, as part of an enhanced recovery after surgery program	2018	irrelevant comparison; block vs. block
Marques, C. J.	CORR Insights <sup>®</sup> : Preoperative Physical Therapy Education Reduces Time to Meet Functional Milestones after Total Joint Arthroplasty	2018	review
Hussien, R. M.; Ibrahim, D. A.; Abdelnaby, I. G. H.	Ultrasound-guided sciatic nerve block in below knee amputation surgery: Sub gluteal versus popliteal approach	2018	irrelevant comparison; block vs block
Chughtai, M.; Sodhi, N.; Jawad, M.; Newman, J. M.; Khlopas, A.; Bhave, A.; Mont, M. A.	Cryotherapy Treatment After Unicompartmental and Total Knee Arthroplasty: A Review	2017	references reviewed
Chen, C.; Li, M.; Wang, K.; Shen, J.; Yang, L.; Bu, X.; Gao, G.	Protective effect of combined general and regional anesthesia on postoperative cognitive function in older arthroplasty patients	2017	irrelevant comparison; general vs. general + regional
Mujica-Mota, R. E.; Watson, L. K.; Tarricone, R.; Jäger, M.	Cost-effectiveness of timely versus delayed primary total hip replacement in Germany: A social health insurance perspective	2017	irrelevant topic; delaying surgery
	Erratum: Drug-free interventions to reduce pain or opioid consumption after total knee arthroplasty: A systematic review and meta-analysis (JAMA Surgery (2017) 152:10 (e172872) DOI: 10.1001/jamasurg.2017.2872)	2018	erratum
Tripathi, R. K.; Vaidya, P. H.; Raote, S.; Desai, M. M.; Chawda, M. B.; Uchil, D.; Rege, N. N.	Efficacy and safety evaluation of myostaal forte, a polyherbal formulation, in treatment of knee osteoarthritis: A randomised controlled pilot study	2017	Irrelevant comparison; herbal mixture vs paracetamol
Lindberg-Larsen, V.; Bandholm, T. Q.; Zilmer, C. K.; Bagger, J.; Hornsleth, M.; Kehlet, H.	Preoperative methylprednisolone does not reduce loss of knee-extension strength after total knee arthroplasty: A randomized, double-blind, placebo-controlled trial of 61 patients	2017	irrelevant comparison: methylprednisolone vs placebo
Bala, A.; Huddleston, J. I.; Goodman, S. B.; Maloney, W. J.; Amanatullah, D. F.	Venous Thromboembolism Prophylaxis After TKA: Aspirin, Warfarin, Enoxaparin, or Factor Xa Inhibitors?	2017	references reviewed
Shin, H. W.; Ju, B. J.; Jang, Y. K.; You, H. S.; Kang, H.; Park, J. Y.	Effect of tramadol as an adjuvant to local anesthetics for brachial plexus block: A systematic review and meta-analysis	2017	references reviewed
Guo, C. W.; Ma, J. X.; Ma, X. L.; Lu, B.; Wang, Y.; Tian, A. X.; Sun, L.; Wang, Y.; Dong, B. C.; Teng, Y. B.	Supraclavicular block versus interscalene brachial plexus block for shoulder surgery: A meta-analysis of clinical control trials	2017	references reviewed

Essex, M. N.; Cheung, R.; Li, C.; Xie, L.	Safety of parecoxib when used for more than 3 days for the management of postoperative pain	2017	mixed population; no ortho sub-analysis
Richardson, C.; Kulkarni, J.	A review of the management of phantom limb pain: Challenges and solutions	2017	references reviewed
Al-Jabri, T.; Tan, J. Y. Q.; Tong, G. Y.; Shenoy, R.; Kayani, B.; Parratt, T.; Khan, T.	The role of electrical stimulation in the management of avascular necrosis of the femoral head in adults: A systematic review	2017	references reviewed
Ciani, O.; Pascarelli, N. A.; Giannitti, C.; Galeazzi, M.; Mereaglia, M.; Fattore, G.; Fioravanti, A.	Mud-Bath Therapy in Addition to Usual Care in Bilateral Knee Osteoarthritis: An Economic Evaluation Alongside a Randomized Controlled Trial	2017	irrelevant topic; mud bath
Cãrdenas, K.; Aranda, M.	Psychotherapies for the Treatment of Phantom Limb Pain	2017	references reviewed
Tayyem, M.; Elhadid, F.; Haddad, R.; Samarah, O.; Ananzah, M.; Ahmad, M.; Hamdan, M.	Perioperative use of pregabalin in total knee arthroplasty: Meta-analysis of randomized controlled trials	2017	references reviewed
Lu, Y.; Huang, H. M.; Yan, J.; Jiang, H.	Comparison of postoperative femoral nerve block, epidural block and intravenous patient-controlled analgesia in pain control and postoperative rehabilitation after total knee arthroplasty	2017	irrelevant comparison; PCA vs. block
Deng, L. Q.; Hou, L. N.; Song, F. X.; Zhu, H. Y.; Zhao, H. Y.; Chen, G.; Li, J. J.	Effect of pre-emptive analgesia by continuous femoral nerve block on early postoperative cognitive function following total knee arthroplasty in elderly patients	2017	irrelevant comparison; preop block vs postop block
Smith, T. O.; Cooper, A.; Peryer, G.; Griffiths, R.; Fox, C.; Cross, J.	Factors predicting incidence of post-operative delirium in older people following hip fracture surgery: a systematic review and meta-analysis	2017	references reviewed
Manassero, A.; Fanelli, A.	Prilocaine hydrochloride 2% hyperbaric solution for intrathecal injection: A clinical review	2017	references reviewed
Batsford, S.; Ryan, C. G.; Martin, D. J.	Non-pharmacological conservative therapy for phantom limb pain: A systematic review of randomized controlled trials	2017	references reviewed
Trabelsi, W.; Ben Gabsia, A.; Lebbi, A.; Sammoud, W.; Labbãˆne, I.; Ferjani, M.	Suprascapular block associated with supraclavicular block: An alternative to isolated interscalene block for analgesia in shoulder instability surgery?	2017	irrelevant comparison; block vs block
Artus, M.; Campbell, P.; Mallen, C. D.; Dunn, K. M.; Van Der Windt, D. A. W.	Generic prognostic factors for musculoskeletal pain in primary care: A systematic review	2017	references reviewed
Mayer, M.; Naylor, J.; Harris, I.; Badge, H.; Adie, S.; Mills, K.; Descallar, J.	Evidence base and practice variation in acute care processes for knee and hip arthroplasty surgeries	2017	references reviewed



Allen, K. D.; Oddone, E. Z.; Coffman, C. J.; Jeffreys, A. S.; Bosworth, H. B.; Chatterjee, R.; McDuffie, J.; Strauss, J. L.; Yancy, W. S.; Datta, S. K.; Corsino, L.; Dolor, R. J.	Patient, provider, and combined interventions for managing osteoarthritis in primary care: A cluster randomized trial	2017	irrelevant topic; non-surgical treatment
Kate, V.; Subair, M.	Early mobilization in surgical ICU: Not a chimera anymore?	2017	review?
Hua, X.; Hu, Y.; Chen, D.; Xiao, Y.; Luo, L.	Efficacy and safety of ultrasound-guided fascia iliaca compartment block using dexmedetomidine combined with ropivacaine in aged patients undergoing hip replacement	2017	irrelevant comparison; general anesthesia vs. ropivacaine
Vandepitte, C.; Kuroda, M.; Witvrouw, R.; Anne, L.; Bellemans, J.; Corten, K.; Vanelderen, P.; Mesotten, D.; Leunen, I.; Heylen, M.; Van Boxtael, S.; Golebiewski, M.; Van De Velde, M.; Knezevic, N. N.; Hadzic, A.	Addition of liposome bupivacaine to bupivacaine HCl versus bupivacaine HCl alone for interscalene brachial plexus block in patients having major shoulder surgery	2017	irrelevant comparison; liposomal bupivacaine vs. control
RichebÃ©, P.; Brulotte, V.	CORR Insights®: No Difference in Early Analgesia Between Liposomal Bupivacaine Injection and Intrathecal Morphine After TKA	2017	review
Hussain, N.; Goldar, G.; Ragina, N.; Banfield, L.; Laffey, J. G.; Abdallah, F. W.	Suprascapular and interscalene nerve block for shoulder surgery: A systematic review and meta-analysis	2017	references reviewed
Kalsotra, S.; Chowadhary, J.; Dogra, S.; Gulati, S.	Comparison of the effects of epidural 0.5% bupivacaine and 0.5% levobupivacaine administration without adjuvant medication on anaesthesia quality, side effect incidence and analgesia requirement times in in electively operated cases on hip and lower extremity	2017	irrelevant comparison; epidural vs. epidural
Salam, S. H.; Noor, M. R.; Gaus, S.; Arif, S. K.; Tanra, A. H.	Comparison of analgesia duration of different epidural bupivacaine volume for lower extremities orthopedic surgery	2017	irrelevant comparison: different doses 6 ml vs 8 ml vs 10 ml
Hoogma, D. F.; Rex, S.; Van De Velde, M.; Coppens, S.	Efficacy of adductor canal block in total knee arthroplasty: A systematic review	2017	references reviewed
Skou, S. T.; Roos, E. M.; Simonsen, O.; Laursen, M. B.; Rathleff, M. S.; Arendt-Nielsen, L.; Rasmussen, S.	The effects of total knee replacement and non-surgical treatment on pain sensitization and clinical pain	2016	irrelevant comparison; surgery vs. nonsurgical treatments
Zhang, D. G.; Peng, K.; Chen, L.; Peng, J.; Xing, F.; Wang, G. L.	Gabapentin can decrease pain intensity for patients undergoing total knee arthroplasty: A systematic review meta-analysis	2016	References Reviewed

Dowsey, M. M.; Scott, A.; Nelson, E. A.; Li, J.; Sundararajan, V.; Nikpour, M.; Choong, P. F. M.	Using discrete choice experiments as a decision aid in total knee arthroplasty: Study protocol for a randomised controlled trial	2016	protocol
Leopold, S. S.	Editor's Spotlight/Take 5: Does a Patient-centered Educational Intervention Affect African-American Access to Knee Replacement? A Randomized Trial	2016	editor's spotlight
Li, D.; Ma, G. G.	Analgesic efficacy and quadriceps strength of adductor canal block versus femoral nerve block following total knee arthroplasty	2016	irrelevant comparison; block vs. block
Sherif, A. A.; Elersy, H. E.	Dexamethasone as adjuvant for femoral nerve block following knee arthroplasty: a randomized, controlled study	2016	irrelevant comparison; bupivacaine vs dexamethasone
McDonall, J.; De Steiger, R.; Reynolds, J.; Redley, B.; Livingston, P.; Botti, M.	Patient participation in postoperative care activities in patients undergoing total knee replacement surgery: Multimedia Intervention for Managing patient Experience (MIME). Study protocol for a cluster randomised crossover trial	2016	< 30 per target group
Kimmel, L. A.; Liew, S. M.; Sayer, J. M.; Holland, A. E.	HIP4Hips (High intensity physiotherapy for hip fractures in the acute hospital setting): A randomised controlled trial	2016	irrelevant comparison: physiotherapy vs intensive physiotherapy
Panigrahi, R.; Roy, R.; Prasad, A.; Mahapatra, A. K.; Priyadarshi, A.; Palo, N.	High dose dexamethasone offers better postoperative analgesia than dexmedetomidine when added to intra articular ropivacaine following knee arthroscopic surgery	2016	irrelevant comparison; intrarticular injections vs. injections vs. injection
Eskandr, A. M.; Ebeid, A. M.	Role of intrathecal nalbuphine on prevention of postspinal shivering after knee arthroscopy	2016	irrelevant comparison: opioid vs control
Varshncy, R. K.; Huda, N.	A prospective randomised double blind study comparing the efficacy of peri-Articular injection with bupivacaine and levobupivacaine for postoperative pain control in total knee arthroplasty	2016	irrelevant comparison; peri-articular injection vs. peri-articular injection
Kuang, M. J.; Ma, J. X.; Wang, Y.; Zhao, J.; Lu, B.; Ma, X. L.	Efficacy of perioperative celecoxib use in primary total knee and hip arthroplasty: A meta-analysis	2016	references reviewed
Kennedy, S. A.	CORR Insights®: Does Brachial Plexus Blockade Result in Improved Pain Scores After Distal Radius Fracture Fixation? A Randomized Trial	2016	Non-RCT
Palhais, N.; Brull, R.; Kern, C.; Jacot-Guillarmod, A.; Charmoy, A.; Farron, A.; Albrecht, E.	Extrafascial injection for interscalene brachial plexus block reduces respiratory complications compared with a conventional intrafascial injection: A randomized, controlled, double-blind trial	2016	irrelevant comparison: extrafascial vs intrafascial brachial plexus block
Momin, A.; Raza, S.; Aziz, A.	Comparison of the efficacy of intra-articular bupivacaine with intra-articular admixture of bupivacaine and tramadol in the immediate postop management of pain after knee arthroscopy	2016	irrelevant comparison; tramadol vs control

Haghighi, M.; Sedighinejad, A.; Ettehad, H.; Mirbolook, A.; Nabi, B. N.; Rad, M. R.; Akbari, Z.; Jahromi, S. K.	Acetaminophen versus fentanyl for post-operative pain after lower limb surgery: A randomized controlled trial	2016	work group exclusion; all males, not comparison of interest
Sutton, D.; Gross, D. P.; Că'tĂ©, P.; Randhawa, K.; Yu, H.; Wong, J. J.; Stern, P.; Varatharajan, S.; Southerst, D.; Shearer, H. M.; Stupar, M.; Goldgrub, R.; van der Velde, G.; Nordin, M.; Carroll, L. J.; Taylor-Vaisey, A.	Multimodal care for the management of musculoskeletal disorders of the elbow, forearm, wrist and hand: A systematic review by the Ontario Protocol for Traffic Injury Management (OPTIMa) Collaboration	2016	references reviewed
Reid, D.	The management of greater trochanteric pain syndrome: A systematic literature review	2016	references reviewed
Levy, D. M.; Frank, R. M.; Bach, B. R.; Verma, N. N.	Perioperative Pain and Swelling Control in Anterior Cruciate Ligament Reconstruction	2016	evidence based guidelines
Xu, W.; Zhang, N.; Ni, M.; Wang, B.; Fang, H.	The comparative study on the combination of ketorolac tromethamine and sufentanil for postoperative analgesia in patients receiving traumatic lower limb surgery: A randomized controlled trial	2016	work group exclusion; not drug combination used in practice
Li, Y. A.; Wu, Y.	Advantages of lumbar epidural anesthesia with ropivacaine in elderly lower limb joint replacement and implant fixation	2016	not published in English
Anastase, D. M.; Winckelmann, J.; Geiger, P.	Effects of regional anaesthesia techniques on patients' satisfaction after total knee arthroplasty	2014	irrelevant comparison: block vs epidural analgesia
Helal, S.; Eskandr, A.; Gaballah, K.; Gaarour, I.	Effects of perineural administration of dexmedetomidine in combination with bupivacaine in a femoral-sciatic nerve block	2016	irrelevant comparison: block vs block
Crawford, D. C.; Li, C. S.; Sprague, S.; Bhandari, M.	Clinical and cost implications of inpatient versus outpatient orthopedic surgeries: A systematic review of the published literature	2015	irrelevant comparison; inpatient vs outpatient surgery
Venugopalan, L.; Taylor, P. N.; Cobb, J. E.; Swain, I. D.	Upper limb functional electrical stimulation devices and their man-machine interfaces	2015	review
Marian, A. A.; Ranganath, Y.; Bayman, E. O.; Senasu, J.; Brennan, T. J.	A Comparison of 2 Ultrasound-Guided Approaches to the Saphenous Nerve Block: Adductor Canal Versus Distal Transarterial: A Prospective, Randomized, Blinded, Noninferiority Trial	2015	irrelevant comparison; block vs block
Bin Abd Razak, H. R.; Yung, W. Y. A.	Postoperative Delirium in Patients Undergoing Total Joint Arthroplasty: A Systematic Review	2015	references reviewed
Kim, Y. S.; Lim, B. G.; Kim, H.; Kong, M. H.; Lee, I. O.	Effects of propofol or desflurane on post-operative spirometry in elderly after knee surgery: A double-blind randomised study	2015	no outcome of interest

Scott, J. E.; Mathias, J. L.; Kneebone, A. C.	Incidence of delirium following total joint replacement in older adults: A meta-analysis	2015	references reviewed
Madhu, K. P.; Gurudath, C. L.	Effectiveness of 0.75% ropivacaine for brachial plexus block in upper limb orthopaedic surgery in comparison with 0.5% bupivacaine	2015	irrelevant comparison: block vs block
Manara, J. R.; Taylor, J.; Nixon, M.	Management of shoulder pain after a cerebrovascular accident or traumatic brain injury	2015	review
Zimmerman, R. M.; Astifidis, R. P.; Katz, R. D.	Modalities for complex regional pain syndrome	2015	references reviewed
Kessler, J.; Marhofer, P.; Hopkins, P. M.; Hollmann, M. W.	Peripheral regional anaesthesia and outcome: Lessons learned from the last 10 years	2015	references reviewed
Haghighi, M.; Sedighinejad, A.; Mirbolook, A.; Nabi, B. N.; Farahmand, M.; Kazemnezhad leili, E.; Shirvani, M.; Jahromi, S. K.	Effect of intravenous intraoperative esmolol on pain management following lower limb orthopedic surgery	2015	irrelevant comparison; esmolol vs placebo
Liu, H. Y.; Yang, C. T.; Cheng, H. S.; Wu, C. C.; Chen, C. Y.; Shyu, Y. I. L.	Family caregivers' mental health is associated with postoperative recovery of elderly patients with hip fracture: A sample in Taiwan	2015	irrelevant topic; mental health of caregivers
Zhang, Z. H.; Shen, B.; Yang, J.; Zhou, Z. K.; Kang, P. D.; Pei, F. X.	Risk factors for venous thromboembolism of total hip arthroplasty and total knee arthroplasty: A systematic review of evidences in ten years	2015	references reviewed
Wordsworth, M.; McGuire, C.; Khan, M.	Cryoamputation: An old surgical technique to be kept on ice?	2015	references reviewed
Beswick, A. D.; Wylde, V.; Goberman-Hill, R.	Interventions for the prediction and management of chronic postsurgical pain after total knee replacement: Systematic review of randomised controlled trials	2015	references reviewed
Geary, M. B.; Elfar, J. C.	Rotator Cuff Tears in the Elderly Patients	2015	probable review
Abdulatif, M.; Amin, S. M. M.; Aboul-Ela, A.; Samuel, E. W. M.; Abdel-Hakim, S. M. A.	Intra-articular versus intravenous magnesium-sulfate as adjuvant to femoral nerve block in arthroscopic knee surgery under general anesthesia: Randomized controlled trial	2015	irrelevant comparison; intraarticular vs iv magnesium sulphate
Smith, T. O.; Latham, S.; Maskrey, V.; Blyth, A.	Patients' perceptions of physical activity before and after joint replacement: A systematic review with meta-ethnographic analysis	2015	irrelevant topic; pts perspectives
Dar, F. A.; Mushtaq, M. B.; Khan, U. M.	Hyperbaric spinal ropivacaine in lower limb and hip surgery: A comparison with hyperbaric bupivacaine	2015	irrelevant comparison: intrathecal ropivacaine vs intrathecal bupivacaine
Nanavati, D. S.; Dave, U. M.; Gondalia, D.; Parmar, V.; Chhaya, V.; Gupta, U.	comparative evaluation of hyperbaric bupivacaine versus isobaric ropivacaine in spinal anaesthesia in lower abdomen and lower limb surgery	2015	irrelevant comparison; intrathecal vs intrathecal

Wang, Q.; Jiang, X.; Tian, W.	Does previous intra-articular steroid injection increase the risk of joint infection following total hip arthroplasty or total knee arthroplasty? A meta-analysis	2014	references reviewed
Schott, N.; Korbus, H.	Preventing functional loss during immobilization after osteoporotic wrist fractures in elderly patients: A randomized clinical trial	2014	protocol
Wylde, V.; Marques, E.; Artz, N.; Blom, A.; Gooberman-Hill, R.	Effectiveness and cost-effectiveness of a group-based pain self-management intervention for patients undergoing total hip replacement: Feasibility study for a randomized controlled trial	2014	<60 total pts
Ullah, H.; Samad, K.; Khan, F. A.	Continuous interscalene brachial plexus block versus parenteral analgesia for postoperative pain relief after major shoulder surgery	2014	references reviewed
Anderson, F.; Bischof, W. F.	Augmented reality improves myoelectric prosthesis training	2014	review?
Taha, A. M.; Abd-Elmaksoud, A. M.	Ropivacaine in ultrasound-guided femoral nerve block: What is the minimal effective anaesthetic concentration (EC90)?	2014	irrelevant comparison: different concentrations of ropivacaine
Tahririan, M. A.; Moayednia, A.; Momeni, A.; Yousefi, A.; Vahdatpour, B.	A randomized clinical trial on comparison of corticosteroid injection with or without splinting versus saline injection with or without splinting in patients with lateral epicondylitis	2014	irrelevant comparison: corticosteroid vs saline
Zhou, B.; Fan, S.; Wang, W. B.; Lu, B.; Zhang, H. Y.; Yang, W. L.; Wang, A. P.	Clinical research on treating fracture of middle and lower 1/3 of tibiofibula by electroacupuncture	2014	irrelevant topic: electroacupuncture vs warm needling moxibustion vs Chinese medicine
Yun, M. J.; Kwon, M. Y.; Kim, D. H.; Lee, J. W.	Combined spinal-epidural anesthesia using a reduced-dose of spinal bupivacaine and epidural top up leads to faster motor recovery after lower extremity surgeries	2014	irrelevant comparison: spinal vs epidural block
Camponovo, C.; Wulf, H.; Ghisi, D.; Fanelli, A.; Riva, T.; Cristina, D.; Vassiliou, T.; Leschka, K.; Fanelli, G.	Intrathecal 1% 2-chloroprocaine vs. 0.5% bupivacaine in ambulatory surgery: A prospective, observer-blinded, randomised, controlled trial	2014	irrelevant comparison: intrathecal vs intrathecal
Hu, X.; Trevelyan, E.; Yang, G.; Lee, M. S.; Lorenc, A.; Liu, J.; Robinson, N.	The effectiveness of acupuncture/TENS for phantom limb syndrome. I: A systematic review of controlled clinical trials	2014	references reviewed
Rahangdale, R.; Kendall, M. C.; McCarthy, R. J.; Tureanu, L.; Doty, R.; Weingart, A.; De Oliveira, G. S.	The effects of perineural versus intravenous dexamethasone on sciatic nerve blockade outcomes: A randomized, double-blind, placebo-controlled study	2014	irrelevant comparison: perineural steroid vs iv steroid
Nayaka, S. R.; Mamatha, K. R.; Raju, K. V. P. K.	A comparative study to assess the efficacy and tolerability of lornoxicam and diclofenac in patients with osteoarthritis of knee in a tertiary care hospital	2014	non-surgical

Obolenskiy, V. N.; Karpenko, A. V.	Efficacy of electrical muscle stimulation in the treatment of patients with shin bone fractures	2014	< 60 total pts
Standifird, T. W.; Cates, H. E.; Zhang, S.	Stair ambulation biomechanics following total knee arthroplasty: A systematic review	2014	references reviewed
Jiang, N.; Hu, Y. J.; Zhang, K. R.; Zhang, S.; Bin, Y.	Intra-articular lidocaine versus intravenous analgesia and sedation for manual closed reduction of acute anterior shoulder dislocation: An updated meta-analysis	2014	References Reviewed
Kim, J. Y.; Lee, J. S.; Lee, K. C.; Kim, H. S.; Kim, S. H.; Kwak, H. J.	The effect of desflurane versus propofol on regional cerebral oxygenation in the sitting position for shoulder arthroscopy	2014	irrelevant topic: GA
Starr, H. M.; Snoddy, M.; Hammond, K. E.; Seiler, J. G.	Flexor tendon repair rehabilitation protocols: A systematic review	2013	references reviewed
Kara, F.; KÃ¼rÃ¼ad, H.; Ã¶elik, M.; Dostbil, A.; Ince, I.; Giren, A. F.; Alici, H. A.	Comparison of the effects of epidural 0.5% bupivacaine and 0.5% levobupivacaine administration on anesthesia quality, side effect incidence, and analgesia requirement times in hip and lower extremity surgery	2013	irrelevant comparison: epidural vs epidural
Wood, T. J.; Sameem, M.; Farrokhyar, F.; Strumas, N.	A systematic review of rehabilitation protocols following surgical repair of the extensor pollicis longus	2013	irrelevant topic; hand surgery
Chaparro, L. E.; Smith, S. A.; Moore, R. A.; Wiffen, P. J.; Gilron, I.	Pharmacotherapy for the prevention of chronic pain after surgery in adults	2013	references reviewed
Rashwan, D.; Fathy El-Rahmawy, G.	Multimodal analgesia after upper limb orthopedic surgeries: Patient controlled intravenous low dose tramadol analgesia with or without intravenous acetaminophen - A comparative study	2013	work group exclusion; not comparison of interest
Helminen, E. E.; Sinikallio, S. H.; Valjakka, A. L.; VÃ¤isÃ¤nen-Rouvali, R. H.; Arokoski, J. P.	Effectiveness of a cognitive-behavioral group intervention for knee osteoarthritis pain: Protocol of a randomized controlled trial	2013	protocol
	Orthopedic surgery and trauma	2013	references reviewed
Rashwan, D.	Levobupivacaine patient controlled analgesia: Epidural versus blind fascia iliaca compartment analgesia-A comparative study	2013	< 30 per target group
Mannix, S. M.; O'Sullivan, C.; Kelly, G. A.	Acupuncture for managing phantom-limb syndrome: A systematic review	2013	references reviewed
Kos, N.; Burger, H.; Vidmar, G.	Association of cognitive status with mobility and functioning after femoral neck fracture surgery in elderly patients: Differences between hemiarthroplasty and internal fixation	2013	irrelevant comparison; hemiarthroplasty vs. internal fixation

Yoo, J. B.; Park, H. J.; Chae, J. Y.; Lee, E. J.; Shin, Y. J.; Ko, J. S.; Kim, N. C.	Effects of ASPAN's evidence-based clinical practice guidelines for promotion of hypothermia of patients with total knee replacement arthroplasty	2013	not published in English
Riddle, D. L.; Keefe, F. J.; Ang, D.; J, K.; Dumenci, L.; Jensen, M. P.; Bair, M. J.; Reed, S. D.; Kroenke, K.	A phase III randomized three-arm trial of physical therapist delivered pain coping skills training for patients with total knee arthroplasty: The KASTPain protocol	2012	protocol
Eltohamy, S. A.	Ultrasound guided two-in-one technique for sciatic and femoral nerve block in below knee surgery: Comparison between two entry points	2012	irrelevant comparison; block approach techniques
Baliga, S.; McNair, C. J.; Barnett, K. J.; MacLeod, J.; Humphry, R. W.; Finlayson, D.	Does circumpatellar electrocautery improve the outcome after total knee replacement? A prospective, randomised, blinded controlled trial	2012	irrelevant topic: electrocautery
Koh, I. J.; Kang, Y. G.; Chang, C. B.; Do, S. H.; Seong, S. C.; Kim, T. K.	Does periarticular injection have additional pain relieving effects during contemporary multimodal pain control protocols for TKA?: A randomised, controlled study	2012	irrelevant comparison: block vs block
Aguirre, J.; Del Moral, A.; Cobo, I.; Borgeat, A.; Blumenthal, S.	The role of continuous peripheral nerve blocks	2012	review
Roberts, M.; Brodribb, W.; Mitchell, G.	Reducing the Pain: A Systematic Review of Postdischarge Analgesia Following Elective Orthopedic Surgery	2012	references reviewed
Stenvall, M.; Berggren, M.; Lundström, M.; Gustafson, Y.; Olofsson, B.	A multidisciplinary intervention program improved the outcome after hip fracture for people with dementia-Subgroup analyses of a randomized controlled trial	2012	irrelevant topic; multimodal geriatric intervention
Ammar, A. S.; Mahmoud, K. M.	Ultrasound-guided single injection infraclavicular brachial plexus block using bupivacaine alone or combined with dexmedetomidine for pain control in upper limb surgery: A prospective randomized controlled trial	2012	irrelevant comparison: ICB vs ICB
Hayes, S. M. S.; Nasr, E. S.; El Motilb, E. A. A.; El Geidi, A. A.	Effect of intra-articular injection of midazolam and/or bupivacaine on postoperative analgesia after arthroscopic knee surgery	2012	irrelevant comparison; intra-articular vs intra-articular
Song, S. Y.; Roh, W. S.	Hypotensive bradycardic events during shoulder arthroscopic surgery under interscalene brachial plexus blocks	2012	review
Atef, H.; el-Din el-Kasaby, A.; Omera, M.; Badr, M.	Optimal dose of hyperbaric bupivacaine 0.5% for unilateral spinal anesthesia during diagnostic knee arthroscopy	2012	irrelevant comparison: different doses, 5 mg, 7.5 mg, 10 mg & 12.5 mg
Hames, H.; McLeod, S.; Millard, W.	Intra-articular lidocaine versus intravenous sedation for the reduction of anterior shoulder dislocations in the emergency department	2011	< 20 per injection group
Sameem, M.; Wood, T.; Ignacy, T.; Thoma, A.; Strumas, N.	A systematic review of rehabilitation protocols after surgical repair of the extensor tendons in zones V-VIII of the hand	2011	irrelevant topic; hand surgery

Johnson, M. R.; Singh, J. A.; Stewart, T.; Gioe, T. J.	Patient understanding and satisfaction in informed consent for total knee arthroplasty: A randomized study	2011	irrelevant topic; satisfaction w/informed consent
Oberhofer, D.; Å akiÄ?, K.; Neseke-Adam, V.; SmiljaniÄ?, A.; Grizelj-StojÄ?Ä?, E.; VukeliÄ?, M.; MrÅ?jiÄ?, V.	Low dose spinal morphine and intravenous diclofenac for postoperative analgesia after total hip and knee arthroplasty	2011	< 30 per target group
Sathitkarnmanee, T.; Thongrong, C.; Tribuddharat, S.; Thananun, M.; Palachewa, K.; Kamhom, R.	A comparison of spinal isobaric levobupivacaine and racemic bupivacaine for lower abdominal and lower extremity surgery	2011	irrelevant comparison: racemic bupivacaine vs levobupivacaine
Lyrztis, C.; Natsis, K.; Papadopoulos, C.; Noussios, G.; Papathanasiou, E.	Efficacy of paracetamol versus diclofenac for grade II ankle sprains	2011	irrelevant topic: non-surgical pts
Karanikolas, M.; Aretha, D.; Tsolakis, I.; Monantera, G.; Kiekkas, P.; Papadoulas, S.; Swarm, R. A.; Filos, K. S.	Optimized perioperative analgesia reduces chronic phantom limb pain intensity, prevalence, and frequency: A prospective, randomized, clinical trial	2011	irrelevant comparison: epidural vs GA vs control
Chesney, A.; Chauhan, A.; Kattan, A.; Farrokhyar, F.; Thoma, A.	Systematic review of flexor tendon rehabilitation protocols in zone II of the hand	2011	irrelevant topic; hand surgery
Spagnoli, A. M.; Rizzo, M. I.; Palmieri, A.; Sorvillo, V.; Quadrini, L.; Scuderi, N.	A single blind controlled comparison of tramadol/paracetamol combination and paracetamol in hand and foot surgery. A prospective study	2011	irrelevant patients; neurological conditions of hand and foot
Kwak, H. J.; Lee, D.; Lee, Y. W.; Yu, G. Y.; Shinn, H. K.; Kim, J. Y.	The intermittent sequential compression device on the lower extremities attenuates the decrease in regional cerebral oxygen saturation during sitting position under sevoflurane anesthesia	2011	irrelevant outcomes: hemodynamic results and oxygen saturation
Gupta, R.; Kaur, S.; Singh, S.; Aujla, K. S.	A comparison of epidural butorphanol and tramadol for postoperative analgesia using CSEA technique	2011	work group exclusion; not route of interest
Yang, C. W.; Jung, S. M.; Kwon, H. U.; Cho, C. K.; Yi, J. W.; Kim, C. W.; Jung, J. K.; An, Y. M.	A clinical comparison of continuous interscalene brachial plexus block with different basal infusion rates of 0.2% ropivacaine for shoulder surgery	2010	irrelevant comparison: intrascelene brachial plexus block at 6 ml/ hr vs 8 ml/hr
Fredrickson, M. J.; Smith, K. R.; Wong, A. C.	Importance of volume and concentration for ropivacaine interscalene block in preventing recovery room pain and minimizing motor block after shoulder surgery	2010	irrelevant comparison: different volumes and concentration of ropivacaine
Straube, S.; Derry, S.; Moore, R. A.; Wiffen, P. J.; McQuay, H. J.	Single dose oral gabapentin for established acute postoperative pain in adults	2010	References Reviewed



Apan, A.; Sari, F.; Ekmekçi, A. B.	Single shot "3-in-1" femoral nerve blockade with 0.25% or 0.375% levobupivacaine provides similar postoperative analgesia for total knee replacement	2010	irrelevant comparison: 0.25% vs 0.375% levobupivacaine
Baskan, S.; Taspinar, V.; Ozdogan, L.; Gulsoy, K. Y.; Erk, G.; Dikmen, B.; Gogus, N.	Comparison of 0.25% levobupivacaine and 0.25% bupivacaine for posterior approach interscalene brachial plexus block	2010	irrelevant comparison: levobupivacaine vs bupivacaine
Arya, A. K. R.; Singh, M.	Comparison of efficacy of epidural fentanyl and pentazocine for lower limb orthopedic surgeries	2010	work group exclusion; comparison not of interest
Singh, J. A.; Murphy, S.; Bhandari, M.	Assessment of the methodologic quality of medical and surgical clinical trials in patients with arthroplasty	2009	references reviewed
Hartrick, C.; Van Hove, I.; Stegmann, J. U.; Oh, C.; Upmalis, D.	Efficacy and tolerability of tapentadol immediate release and oxycodone HCl immediate release in patients awaiting primary joint replacement surgery for end-stage joint disease: A 10-day, phase III, randomized, double-blind, active- and placebo-controlled study	2009	published before 2010
Cuvillon, P.; Nouvellon, E.; Ripart, J.; Boyer, J. C.; Dehour, L.; Mahamat, A.; L'Hermite, J.; Boisson, C.; Vialles, N.; Lefrant, J. Y.; De La Coussaye, J. E.	A comparison of the pharmacodynamics and pharmacokinetics of bupivacaine, ropivacaine (with epinephrine) and their equal volume mixtures with lidocaine used for femoral and sciatic nerve blocks: A double-blind randomized study	2009	irrelevant comparison; block vs block
Siddiqui, A. K.; Sadat-Ali, M.; Al-Ghamdi, A. A.; Mowafi, H. A.; Ismail, S. A.; Al-Dakheel, D. A.	The effect of etoricoxib premedication on postoperative analgesia requirement in orthopedic and trauma patients	2008	published before 2010
Touray, S. T.; De Leeuw, M. A.; Zuurmond, W. W. A.; Perez, R. S. G. M.	Psoas compartment block for lower extremity surgery: A meta-analysis	2008	references reviewed
Karvonen, S.; Salomäki, T.; Olkkola, K. T.	Efficacy of oral paracetamol and ketoprofen for pain management after major orthopedic surgery	2008	<30 pts per group
Kakkar, A. K.; Brenner, B.; Dahl, O. E.; Eriksson, B. I.; Mouret, P.; Muntz, J.; Soglian, A. G.; Pap, A. F.; Misselwitz, F.; Haas, S.	Extended duration rivaroxaban versus short-term enoxaparin for the prevention of venous thromboembolism after total hip arthroplasty: a double-blind, randomised controlled trial	2008	irrelevant comparison: oral vs subcutaneous
Virmani, R.; Ghai, A.; Singh, D. K.	A study to compare continuous epidural infusion and intermittent bolus of bupivacaine for postoperative analgesia following renal surgery	2008	irrelevant comparison: continuous vs intermittent epidural

Salimullah, H.; Samad, K.; Khan, F. A.	Continuous interscalene blockade versus parenteral analgesia for postoperative pain relief after major shoulder surgery	2008	protocol
Cekmen, N.; Arslan, M.; Musdal, Y.; Babacan, A.	Comparison of the effects of a single dose of epidural ropivacaine and bupivacaine in arthroscopic operations	2008	irrelevant comparison: epidural vs epidural
White, B. J.; Walsh, M.; Egol, K. A.; Tejwani, N. C.	Intra-articular block compared with conscious sedation for closed reduction of ankle fracture-dislocations: A prospective randomized trial	2008	irrelevant comparison: block vs conscious sedation
Petersen, M. K.; Andersen, N. T.; SÅ, balle, K.	Self-reported functional outcome after primary total hip replacement treated with two different perioperative regimes: A follow-up study involving 61 patients	2008	< 30 per target group
Beaudet, V.; Williams, S. R.; TÃ©treault, P.; Perrault, M. A.	Perioperative Interscalene Block Versus Intra-Articular Injection of Local Anesthetics for Postoperative Analgesia in Shoulder Surgery	2008	work group exclusion; clinical contraindication
Feng, Y.; Ju, H.; Yang, B.; An, H.	Effects of a Selective Cyclooxygenase-2 Inhibitor on Postoperative Inflammatory Reaction and Pain After Total Knee Replacement	2008	<60 total pts
Dijkstra, T.; Reesink, J. A.; Verdouw, B. C.; Van Der Pol, W. S. C. J. M.; Feberwee, T.; Vulto, A. G.	Spinal anaesthesia with articaine 5% vs bupivacaine 0.5% for day-case lower limb surgery: A double-blind randomized clinical trial	2008	irrelevant comparison: spinal articaine vs spinal bupivacaine
Handoll, H. H. G.; Sherrington, C.	Mobilisation strategies after hip fracture surgery in adults	2007	references reviewed
Lefevre-Colau, M. M.; Babinet, A.; Fayad, F.; Fermanian, J.; Anract, P.; Roren, A.; Kansao, J.; Revel, M.; Poiraudau, S.	Immediate mobilization compared with conventional immobilization for the impacted nonoperatively treated proximal humeral fracture: A randomized controlled trial	2007	not target population; non-surgical pts
Khan, Z. U.; Iqbal, J.; Saleh, H.; El Deek, A. M.	Intravenous paracetamol is as effective as morphine in knee arthroscopic day surgery procedures	2007	published before 2010
Cruvinel, M. G. C.; De Castro, C. H. V.; Silva, Y. P.; Bicalho, G. P.; FranÃ§a, F. D. O.; Lago, F.	A comparative study on the postoperative analgesic efficacy of 20, 30, or 40 ml of ropivacaine in posterior brachial plexus block	2007	irrelevant comparison: different volumes, 20 ml vs 30 ml, 40 ml
Wasielowski, N. J.; Kotsko, K. M.	Does eccentric exercise reduce pain and improve strength in physically active adults with symptomatic lower extremity tendinosis? A systematic review	2007	references reviewed
Keramidas, E. G.; Rodopoulou, S. G.	Ropivacaine versus lidocaine in digital nerve blocks: A prospective study	2007	irrelevant comparison: infiltration vs infiltration
Porcheret, M.; Jordan, K.; Croft, P.	Treatment of knee pain in older adults in primary care: Development of an evidence-based model of care	2007	references reviewed
Chattopadhyay, S.; Mitra, L. G.; Biswas, B. N.; Majumder, P.	Tramadol as an adjuvant for brachial plexus block	2007	published before 2010

Solheim, N.; Rosseland, L. A.; Stubhaug, A.	Intra-Articular Morphine 5 mg After Knee Arthroscopy Does Not Produce Significant Pain Relief When Administered to Patients With Moderate to Severe Pain via an Intra-Articular Catheter	2006	published before 2010
Hartrick, C. T.; Bourne, M. H.; Gargiulo, K.; Damaraju, C. V.; Vallow, S.; Hewitt, D. J.	Fentanyl Iontophoretic Transdermal System for Acute-Pain Management After Orthopedic Surgery: A Comparative Study With Morphine Intravenous Patient-Controlled Analgesia	2006	published before 2010
Singh, V.; Gupta, L. K.; Singh, G. P.	Comparison among intrathecal fentanyl and butorphanol in combination with bupivacaine for lower limb surgeries	2006	published before 2010
Malik, P.; Manchanda, C.; Malhotra, N.	Comparative evaluation of epidural fentanyl and butorphanol for postoperative analgesia	2006	published before 2010
Fournier, R.; Weber, A.; Gamulin, Z.	No Differences Between 20, 30, or 40 mL Ropivacaine 0.5% in Continuous Lateral Popliteal Sciatic-Nerve Block	2006	irrelevant comparison: different doses
Capdevila, X.; Dadure, C.; Bringuier, S.; Bernard, N.; Biboulet, P.; Gaertner, E.; Macaire, P.	Effect of patient-controlled perineural analgesia on rehabilitation and pain after ambulatory orthopedic surgery: A multicenter randomized trial	2006	mixed population; hallux valgus surgery
Charalambous, C. P.; Tryfonidis, M.; Alvi, F.; Kumar, R.; Hirst, P.	Purely Intra-articular Versus General Anesthesia for Proposed Arthroscopic Partial Meniscectomy of the Knee: A Randomized Controlled Trial	2006	irrelevant comparison; Intra-articular vs GA
Gulur, P.; Nishimori, M.; Ballantyne, J. C.	Regional anaesthesia versus general anaesthesia, morbidity and mortality	2006	review
Camci, E.; Koltka, K.; Celenk, Y.; Tugrul, M.; Pembeci, K.	Bispectral index-guided desflurane and propofol anesthesia in ambulatory arthroscopy: Comparison of recovery and discharge profiles	2006	irrelevant topic: Bispectral index-guided desflurane
Ezri, T.; Zahalka, I.; Zabeeda, D.; Feldbrin, Z.; Eidelman, A.; Zimlichman, R.; Medalion, B.; Evron, S.	Similar incidence of hypotension with combined spinal-epidural or epidural alone for knee arthroplasty	2006	irrelevant comparison: spinal-epidural vs epidural
Berthelot, J. M.; Labat, J. J.; Le Goff, B.; Gouin, F.; Maugars, Y.	Provocative sacroiliac joint maneuvers and sacroiliac joint block are unreliable for diagnosing sacroiliac joint pain	2006	irrelevant topic; diagnostic technique
Cheing, G. L. Y.; Wan, J. W. H.; Kai Lo, S.	Ice and pulsed electromagnetic field to reduce pain and swelling after distal radius fractures	2005	<30 pts per group
De Beer, J. D. V.; Winemaker, M. J.; Donnelly, G. A. E.; Miceli, P. C.; Reiz, J. L.; Harsanyi, Z.; Payne, L. W.; Darke, A. C.	Efficacy and safety of controlled-release oxycodone and standard therapies for postoperative pain after knee or hip replacement	2005	published before 2010

Ning, N.; Zeng, J. C.; Liu, X. Y.	Effect of continuous passive motion assisted with diathermia on the restoration of elbow and knee function	2005	irrelevant topic; non-surgical treatment
Morin, A. M.; Eberhart, L. H. J.; Behnke, H. K. E.; Wagner, S.; Koch, T.; Wolf, U.; Nau, W.; Kill, C.; Geldner, G.; Wulf, H.	Does femoral nerve catheter placement with stimulating catheters improve effective placement? A randomized, controlled, and observer-blinded trial	2005	irrelevant topic; catheter placement
Bowrey, S.; Hamer, J.; Bowler, I.; Symonds, C.; Hall, J. E.	A comparison of 0.2 and 0.5 mg intrathecal morphine for postoperative analgesia after total knee replacement	2005	published before 2010
Dogan, M.; Turker, H.; Ugurlu, M.; Ergun, F.; Bozkurt, M.	Do peroperative supine and prone positions have an effect on postspinal headache incidence?	2005	Irrelevant and confounding; sinus operation vs TKA pts, prone vs supine position
Wong, J. O. N.; Tan, T. D. M.; Leung, P. O.; Tseng, K. F.; Cheu, N. W.; Tang, C. S.	Comparison of the effect of two different doses of 0.75% glucose-free ropivacaine for spinal anesthesia for lower limb and lower abdominal surgery	2004	irrelevant comparison: 3.5 ml vs 4.5 ml spinal ropivacaine
Michlovitz, S. L.; Harris, B. A.; Watkins, M. P.	Therapy interventions for improving joint range of motion: A systematic review	2004	References Reviewed
Taboada, M.; Álvarez, J.; Cortés, J.; Rodríguez, J.; Rabanal, S.; Gude, F.; Atanassoff, A.; Atanassoff, P. G.	The Effects of Three Different Approaches on the Onset Time of Sciatic Nerve Blocks with 0.75% Ropivacaine	2004	irrelevant topic; injection techniques
Taboada, M.; Cortés, J.; Rodríguez, J.; Ulloa, B.; Álvarez, J.; Atanassoff, P. G.	Lateral Approach to the Sciatic Nerve in the Popliteal Fossa: A Comparison between 1.5% Mepivacaine and 0.75% Ropivacaine	2003	irrelevant comparison; block vs. block
Cooke, M. W.; Lamb, S. E.; Marsh, J.; Dale, J.	A survey of current consultant practice of treatment of severe ankle sprains in emergency departments in the United Kingdom	2003	irrelevant topic; Non-RCT
Legenstein, R.; Bartsch, P.; Ungersböck, A.	Indomethacin versus meloxicam for prevention of heterotopic ossification after total hip arthroplasty	2003	work group exclusion; not focusing on pain relief
Crowe, J.; Henderson, J.	Pre-arthroplasty rehabilitation is effective in reducing hospital stay	2003	No outcomes of interest
Liukkonen, K.; Santanen, U.; Pere, P.; Erkola, O.; Rautoma, P.	Peroral tramadol premedication increases postoperative nausea and delays home-readiness in day-case knee arthroscopy patients	2002	irrelevant comparison; opioid vs placebo
Kayacan, N.; Boztuğ, N.; Arici, G.; Karsli, B.; Erman, M.	The effect of intra-articular neostigmine, tramadol, tenoxicam and bupivacaine on postoperative pain	2002	published before 2010

Eledjam, J. J.; Cuvillon, P.; Capdevila, X.; Macaire, P.; Serri, S.; Gaertner, E.; Jochum, D.; Perron, Y.; Mahiou, P.; Bassoul, B.; Choquet, O.; Kuhlman, G.; Bouaziz, H.; Le Pelley, E.; Estebe, J. P.	Postoperative analgesia by femoral nerve block with ropivacaine 0.2% After major knee surgery: Continuous versus patient-controlled techniques	2002	irrelevant comparison; PCA vs. regional
Morsi, E.	Continuous-flow cold therapy after total knee arthroplasty	2002	non-RCT
Jensen, M. P.; Chen, C.; Brugger, A. M.	Postsurgical pain outcome assessment	2002	published before 2010
Riad, T.; Williams, B.; Musson, J.; Wheatley, B.	Intrathecal morphine compared with diamorphine for postoperative analgesia following unilateral knee arthroplasty	2002	published before 2010
Dershwitz, M.; Michalowski, P.; Chang, Y.; Rosow, C. E.; Conlay, L. A.	Postoperative nausea and vomiting after total intravenous anesthesia with propofol and remifentanyl or alfentanil: How important is the opioid?	2002	published before 2010
	Erratum: General versus regional anaesthesia for hip fracture surgery: A meta-analysis of randomized trials (British Journal of Anaesthesia (2000) vol. 84 (450-455))	2002	erratum
Mastronardi, L.; Pappagallo, M.; Puzilli, F.; Tatta, C.; Sonntag, V. K. H.; Long, D. M.; Elias, W. J.; Burchiel, K. J.; Benzel, E. C.	Efficacy of the morphine-Adcon-L compound in the management of postoperative pain after lumbar microdiscectomy	2002	published before 2010
Jacobson, E.; Forssblad, M.; Weidenhielm, L.; Renström, P.	Knee arthroscopy with the use of local anesthesia - An increased risk for repeat arthroscopy? A prospective, randomized study with a six-month follow-up	2002	irrelevant comparison; block vs control
Imbelloni, L. E.; Beato, L.	Comparative study between 0.5% isobaric bupivacaine and a 0.5% isobaric mixture of 75% S(-) bupivacaine and 25% R(+) bupivacaine in spinal anesthesia for orthopedic surgery	2001	irrelevant comparison; spinal anesthesia vs. spinal anesthesia
Scheinin, H.; Virtanen, T.; Kentala, E.; Uotila, P.; Laitio, T.; Hartiala, J.; Heikkilä, H.; Sariola-Heinonen, K.; Pullisaar, O.; Yli-Mäxyry, S.; Jalonen, J.	Epidural infusion of bupivacaine and fentanyl reduces perioperative myocardial ischaemia in elderly patients with hip fracture - A randomized controlled trial	2000	published before 2010
Poiraudeau, S.; Martinez, M.; Anract, P.; Chevrot, A.; Revel, M.	Value of hip anesthesia to characterize the main origin of pain in hip-spine osteoarthritis	2000	irrelevant topic; non-surgical

Jones, T. S.	Comparison of axillary block techniques: is there a difference in success rates?	1997	irrelevant comparison; block vs. block vs. block
Cook, T. M.; Tuckey, J. P.; Nolan, J. P.	Analgesia after day-case knee arthroscopy: Double-blind study of intra-articular tenoxicam, intra-articular bupivacaine and placebo	1997	published before 2000
Felhendler, D.; Lisander, B.	Pressure on acupoints decreases postoperative pain	1996	<60 total pts
Haynes, T. K.; Appadurai, I. R.; Power, I.; Rosen, M.; Grant, A.	Intra-articular morphine and bupivacaine analgesia after arthroscopic knee surgery	1994	published before 2010
Kovar, P. A.; Allegrante, J. P.; MacKenzie, C. R.; Peterson, M. G. E.; Gutin, B.; Charlson, M. E.	Supervised fitness walking in patients with osteoarthritis of the knee: A randomized, controlled trial	1992	confounding treatment: exercise program and education
	Impact of local compression cryotherapy combined with continuous passive motion on the early functional recovery after total knee arthroplasty	2017	not published in English
Maffulli, N.; Tallon, C.; Wong, J.; Lim, K. P.; Bleakney, R.	Early weightbearing and ankle mobilization after open repair of acute midsubstance tears of the achilles tendon	2003	< 30 per target group
Gupta, A.	The effectiveness of geriatrician-led comprehensive hip fracture collaborative care in a new acute hip unit based in a general hospital setting in the UK	2014	non-RCT
Galante, V. N.; Vicenti, G.; Corina, G.; Mori, C.; Abate, A.; Picca, G.; Conserva, V.; Speciale, D.; Scialpi, L.; Tartaglia, N.; et al.,	Hybrid external fixation in the treatment of tibial pilon fractures: a retrospective analysis of 162 fractures	2016	non-RCT
Bohl, D. D.; Tyler, J. L.; Calkins, E.; Darrith, B.; Edmiston, T.; Nam, D.; Gerlinger, T. L.; Levine, B. R.; Della Valle, C. J.	Physical therapy on postoperative day 0 following total knee arthroplasty: a randomized controlled trial of 394 patients	2019	repeat of 337
Kutzner, K. P.; Paulini, C.; Hechtner, M.; Rehbein, P.; Pfeil, J.	Postoperative analgesia after total knee arthroplasty: continuous intra-articular catheter vs. continuous femoral nerve block	2015	not published in English
Mucha, C.	Effect of electrical stimulation in quadriceps femoris muscle after anterior cruciate ligament reconstruction	2004	irrelevant outcome: atrophy of quadriceps muscle
Cimino, W.; Ichtertz, D.; Slabaugh, P.	Early mobilization of ankle fractures after open reduction and internal fixation	1991	<60 total pts

Tiwari, A. K.; Prasad, A.	In response to "Is Continuous Adductor Canal Block Better than Continuous Femoral Nerve Block after Total Knee Arthroplasty? Effect on Ambulation Ability, Early Functional Recovery and Pain Control: a Randomized Controlled Trial"	2015	letter to editor
Walls, R. J.; McHugh, G.; Moyna, N. M.; O'Byrne, J. M.	Neuromuscular electrical stimulation improves preoperative strength and function in total knee arthroplasty for osteoarthritis	2008	<60 total pts
Wood, T. J.; Thornley, P.; Petruccelli, D.; Kabali, C.; Winemaker, M.; de Beer, J.	Preoperative Predictors of Pain Catastrophizing, Anxiety, and Depression in Patients Undergoing Total Joint Arthroplasty	2016	irrelevant topic; Non-RCT
Cai, L. B.; Liu, Y. J.; Zhao, H.; Xu, H. P.; Gao, H. H.; Dong, Y. Z.	Cognitive behavior therapy alleviates kinesiophobia after total knee arthroplasty	2017	not published in English
Johnson, C. C.; tal,	Effectiveness of a physician education program in reducing consumption of hospital resources in elective total hip replacement	1996	non-RCT
Girrbach, R.	Effects of multidisciplinary education on total hip arthroplasty patients versus standard education	2005	irrelevant topic; pre-admission education; not periop window
Bernardino, C. M.; Fernandez, A. M.; Vazquez, R. S.; Aviles, M. C.; Edelaar, P.; Carro, L. P.	Effectiveness of audiovisual Internet for knee arthroscopy patient education	2015	not published in English
Yeh, M. L.; Chen, H. H.; Liu, P. H.	Effects of multimedia with printed nursing guide in education on self-efficacy and functional activity and hospitalization in patients with hip replacement	2005	non-RCT
	The effect of education and supervised exercise on physical activity, pain, quality of life and self-efficacy - an intervention study with a reference group	2018	non-RCT
Jonsson, B.; Sigurdsson, E.; Siggeirsdottir, K.; Janssen, H.; Gudnason, V.; Matthasson, T.	Early discharge, education and home based rehabilitation reduces unit costs after total hip replacement: results of a cost analysis in a randomised study	2006	irrelevant comparison; home vs early discharge
Cheon, Y. M.; Yoon, H.	The Effects of 30-Minutes of Pre-Warming on Core Body Temperature, Systolic Blood Pressure, Heart Rate, Postoperative Shivering, and Inflammation Response in Elderly Patients with Total Hip Replacement under Spinal Anesthesia: a Randomized Double-blind Controlled Trial	2017	non-RCT
Xu, F.; Lv, Y. M.; Song, Y. C.; Li, X.; Xing, E. H.; Yang, Y.; Du, Y. L.; Zhang, L. C.; Dai, H. F.; Dong, X. Q.; et al.,	Ice intervention inhibits hemoglobin decrease and pain after total knee replacement	2015	not published in English

Ariza-Vega, P.; Kristensen, M. T.; Martin-Martin, L.; Jimenez-Moleon, J. J.	Predictors of Long-Term Mortality in Older People With Hip Fracture	2015	No outcomes of interest
Beloosesky, Y.; Grinblat, J.; Epelboym, B.; Weiss, A.; Grosman, B.; Hendel, D.	Functional gain of hip fracture patients in different cognitive and functional groups	2002	irrelevant topic; Non-RCT
Arinzon, Z.; Fidelman, Z.; Zuta, A.; Peisakh, A.; Berner, Y. N.	Functional recovery after hip fracture in old-old elderly patients	2005	irrelevant comparison: old age and functional recovery
Tang, J.; Yang, T.; Xiong, X. J.; Chen, L.; Cheng, Z. Y.; Zhan, F. B.; Liao, Y. M.	Air wave pressure therapy in prevention of deep vein thrombosis of the lower extremity after total knee arthroplasty	2013	not published in English
Usichenko, T. I.; Lysenjuk, V. P.; Dinse, M.; Pavlovic, D.; Lehmann, C.	Auricular acupuncture reduces intraoperative fentanyl requirement during total hip arthroplasty - A randomized double-blinded study	2007	<30 pts per group
Sharan, D.; Rajkumar, J. S.	A comparative study on the effectiveness of mirror therapy and constrained induced movement therapy in cerebral palsy	2018	irrelevant topic: children
Martinez, L.; Esteve, V.; Yeste, M.; Artigas, V.; Llagostera, S.	Neuromuscular electrostimulation: a new therapeutic option to improve radio-cephalic arteriovenous fistula maturation in end-stage chronic kidney disease patients	2017	irrelevant topic; arteriovenous fistula maturation, non-orthopedic surgery
Kim, H. J.; Oh, J. E.; Koh, W. U.; Ro, Y. J.; Yang, H. S.	Comparison of warming methods for core temperature preservation during total knee arthroplasty using a pneumatic tourniquet	2016	Irrelevant outcome: hypothermia, esophageal temperature
Parodi, D.; Valderrama, J.; Tobar, C.; Besomi, J.; Lpez, J.; Lara, J.; Ilic, J. P.	Effect of warmed irrigation solution on core body temperature during hip arthroscopy for femoroacetabular impingement	2014	non-RCT
Habib, G.; Artul, S.; Chernin, M.; Hakim, G.; Jabbour, A.	The Effect of Intra-articular Injection of Betamethasone Acetate/Betamethasone Sodium Phosphate at the Knee Joint on the Hypothalamic-Pituitary-Adrenal Axis: a Case-Controlled Study	2013	irrelevant topic; non-surgical
Sai Kaushik, P. H.; Kamath, S. S.; Kaminuath, S. U.	A comparison between intra-articular 0.2% ropivacaine and 0.25% bupivacaine for post-operative analgesia following day-care arthroscopic knee surgeries	2018	irrelevant comparison: intra-articular ropivacaine vs bupivacaine
Zhu, X. Y.; Yin, Z. S.; Lu, M.; Jiang, Z.	Analgesic effect of periarticular multimodal drug injection versus nerve block in total knee arthroplasty	2017	not published in English
Huang, G. S.; Yeh, C. C.; Kong, S. S.; Lin, T. C.; Ho, S. T.; Wong, C. S.	Intra-articular ketamine for pain control following arthroscopic knee surgery	2000	<30 pts per group



Gwak, M. S.; Kim, W. H.; Choi, S. J.; Lee, J. J.; Ko, J. S.; Kim, G. S.; Kim, Y. I.; Kim, M. H.	Arthroscopic shoulder surgery under general anesthesia with brachial plexus block: postoperative respiratory dysfunction of combined obstructive and restrictive pathology	2013	No outcomes of interest
Pang, L. C.; Zhao, F.; Yang, J. S.; Zhao, Y. F.	Anesthetic effect of different concentrations of low-dose hypobaric ropivacaine in elderly knee or hip replacement	2017	not published in English
Zhu, W. B.	Comparison of different anesthesia drugs in hip joint replacement	2014	not published in English
Malek, J.; Kurzova, A.	Intrathecal fentanyl and sufentanil added to bupivacaine augments analgesia after surgical repair of hip fracture	2004	published before 2010
Gutiérrez-Mendoza, I.; Pérez-Correa, J. J.; Serna-Vela, F.; Góngora-Ortega, J.; Vilchis-Huerta, V.; Pérez-Guzmán, C.; Hernández-Garduño, E.; Vidal-Rodríguez, F. A.	Analgesic effect of intra-articular fentanyl in knee arthroscopy to treat patellofemoral lateral hyperpressure syndrome	2009	not published in English
Zhang, D. S.; Zhou, H.	Effects of different analgesia schemes on joint function and adverse reactions following total knee arthroplasty	2015	not published in English
Calvo, R.; Figueroa, D.; Arellano, S.; Schmidt-Hebbel, A.; Ramos, M.; Riquelme, A.	Femoral nerve block in anterior cruciate ligament surgery; a prospective randomised trial	2016	not published in English
Elkassabany, N.; Cai, L. F.; Mehta, S.; Ahn, J.; Pieczynski, L.; Polomano, R. C.; Picon, S.; Hogg, R.; Liu, J.	Does Regional Anesthesia Improve the Quality of Postoperative Pain Management and the Quality of Recovery in Patients Undergoing Operative Repair of Tibia and Ankle Fractures?	2015	irrelevant comparison; systemic analgesia vs. regional
Athar, M.; Ahmed, S. M.; Ali, S.; Doley, K.; Varshney, A.; Siddiqi, M. M. H.	Levobupivacaine or ropivacaine: a randomised double blind controlled trial using equipotent doses in spinal anaesthesia	2016	not published in English
Bahram, M. A. L.; Monem, A. A.; Saleh, A. K.	Ropivacaine hydrochloride instillation vs parenteral analgesia (Tramadol) for pain control following laparoscopic cholecystectomy	2016	irrelevant topic: cholecystectomy
	Letter to the Editor on "Local Infiltration Analgesia With Liposomal Bupivacaine Improves Pain Scores and Reduces Opioid Use After Total Knee Arthroplasty: results of a Randomized Controlled Trial"	2018	letter to editor
	Response to Letter to the Editor on "Local Infiltration Analgesia With Liposomal Bupivacaine Improves Pain Scores and Reduces Opioid Use After Total Knee Arthroplasty: results of a Randomized Controlled Trial"	2018	letter to editor

Hu, S.; Zhang, Z. Y.; Hua, Y. Q.; Li, J.; Cai, Z. D.	Regional anesthesia improves perioperative events in patients having total hip or knee replacement	2010	references reviewed
	Comparison of the effects of sodium hyaluronate-chondroitin sulphate and corticosteroid in the treatment of lateral epicondylitis: a prospective randomized trial	2015	irrelevant topic; non-surgical
Brodner, G.; Buerkle, H.; Van Aken, H.; Lambert, R.; Schweppe-Hartenauer, M. L.; Wempe, C.; Gogarten, W.	Postoperative analgesia after knee surgery: a comparison of three different concentrations of ropivacaine for continuous femoral nerve blockade	2007	irrelevant comparison; block vs. block vs. block
Aksoy, M.; Dostbil, A.; Ince, I.; Ahiskalioglu, A.; Alici, H.; Aydin, A.	Continuous spinal anesthesia versus ultrasound-guided combined psoas compartment-sciatic nerve block for hip replacement surgery in elderly high-risk patients: a prospective randomised study	2014	No outcomes of interest
Wason, R. Gogia A. Sahni ARupam	Comparison of Hypobaric, Near Isobaric and Hyperbaric Bupivacaine for spinal anaesthesia in patients undergoing knee arthroscopy	2002	irrelevant comparison; local vs. local vs. local
Dysart, S. H.; Dagenais, S.	Letter to the Editor on "Effectiveness of Bupivacaine Liposome Injectable Suspension for Postoperative Pain Control in Total Knee Arthroplasty: a Prospective, Randomized, Double Blind, Controlled Study"	2017	letter to editor
Aiello, P. M.; Freeman, D. C.; Warritay, O. K.; DeClaire, J. H.	Response to Letter to the Editor on "Effectiveness of Bupivacaine Liposome Injectable Suspension for Postoperative Pain Control in Total Knee Arthroplasty: a Prospective, Randomized, Double Blind, Controlled Study"	2017	letter to editor
Im, K. S.; Kwon, Y. S.; Jung, H. J.; Lee, J. M.; Kim, J. B.; Park, K.	Comparison of Intra-articular versus Intra-venous Patient Controlled Analgesia (PCA) following Arthroscopic Shoulder Surgery	2007	not published in English
Villasis-Keever, M. A.; Rendon-Macias, M. E.; Escamilla-Nunez, A.	Systematic review to assess the effectiveness and safety of parecoxib	2009	not published in English
Sun, X. J.; Zhang, H. X.; Dong, B. H.; Li, J.; Wu, X. C.; Xiao, L.; Zhang, H.; Cai, L.; Wang, Q.	Analgesic effects of continuous fascia iliaca compartment block versus continuous epidural analgesia after total hip arthroplasty	2014	not published in English
Barroso Rosa, S.; James, D.; Matthews, B. D.	Is knee arthroscopy under local anaesthetic a patient-friendly technique? A prospective controlled trial	2016	irrelevant comparison; different measurement questionnaire
Kendall, M. C.; Castro Alves, L. J.	Letter to Editor "Optimizing the dose of local infiltration analgesia and gabapentin for total knee arthroplasty, a randomized single blind trial in 128 patients"	2018	letter to editor

Sonnery-Cottet, B.; Saithna, A.; Azeem, A.; Choudja, E.; Pic, J. B.; Cabaton, J.; Thaumat, M.	Analgesia after ACL reconstruction: hamstring donor-site injection versus intra-articular local anaesthetic injection	2017	irrelevant comparison: LA vs LA
	CORR Insights: does Brachial Plexus Blockade Result in Improved Pain Scores After Distal Radius Fracture Fixation? A Randomized Trial	2016	review
	Accuracy comparisons of intra-articular knee injection between the new modified anterolateral Approach and superolateral approach in patients with symptomatic knee osteoarthritis without effusion	2019	irrelevant comparison: modified anterior approach vs standard
Gao, W. L.; Li, H.; Liu, B. Q.; Hu, Y.; Liu, J. J.; Yin, L.; Liu, H.; Mei, B.; Yin, Z. S.	Analgesic effect of femoral and sciatic nerve block under multimodal analgesia in total knee arthroplasty	2017	not published in English
Hegazy, N. A.; Sultan, S. S.	Comparison between effects of adductor canal block and femoral nerve block on early postoperative course in total knee arthroplasty: a prospective double-blind, randomized controlled study	2015	irrelevant comparison; block vs. block
Guo, Y. H.; A, L. D.; Jia, Z.	Effects of lumbar plexus-sciatic nerve block combined with sevoflurane on cognitive function in elderly patients after hip arthroplasty: study protocol for a prospective, single-center, open-label, randomized, controlled, clinical trial	2017	not published in English
Schwappach, J.; Dryden, S. M.; Salottolo, K. M.	Preliminary Trial of Intra-articular LMWF-5A for Osteoarthritis of the Knee	2017	irrelevant comparison; intrarticular injections vs. injections
Sancheti, P.; Shetty, V. D.; Dhillon, M. S.; Sprague, S. A.; Bhandari, M.	India-based knee osteoarthritis evaluation (iKare): a multi-centre cross-sectional study on the management of knee pain and early osteoarthritis in India	2017	irrelevant topic; Non-RCT
	Letter to the Editor on "Continuous Adductor Canal Blocks Provide Superior Ambulation and Pain Control Compared to Epidural Analgesia for Primary Knee Arthroplasty: a Randomized, Controlled Trial. J Arthroplasty"	2018	letter to editor
	Response to the Letter to the Editor on "Continuous Adductor Canal Blocks Provide Superior Ambulation and Pain Control Compared to Epidural Analgesia for Primary Knee Arthroplasty: a Randomized, Controlled Trial"	2018	letter to editor
Daruwalla, Z. J.; Halpenny, M.; Mullett, H.	Day case shoulder surgery: satisfactory pain control without regional anaesthesia. A prospective analysis of a perioperative protocol	2009	irrelevant comparison; block vs. block

Carroll, I. R.; Hah, J. M.; Barelka, P. L.; Wang, C. K.; Wang, B. M.; Gillespie, M. J.; McCue, R.; Younger, J. W.; Trafton, J.; Humphreys, K.; et al.,	Pain Duration and Resolution following Surgery: an Inception Cohort Study	2015	irrelevant topic; Non-RCT
	Letter to the Editor on "Randomized Prospective Trial Comparing the Use of Intravenous Versus Oral Acetaminophen in Total Joint Arthroplasty"	2017	letter to editor
Politi, J.; Davis, R. L.; Matrka, A.	Response to Letter to the Editor on "Randomized Prospective Trial Comparing the Use of Intravenous vs Oral Acetaminophen in Total Joint Arthroplasty"	2017	response to letter to the editor
Kim, S. H.; Yoon, K. B.; Yoon, D. M.; Yoo, J. H.; Ahn, K. R.	Influence of Centrally Mediated Symptoms on Postoperative Pain in Osteoarthritis Patients Undergoing Total Knee Arthroplasty: a Prospective Observational Evaluation	2015	irrelevant comparison; seperated by symptoms
Li, L.; Pan, Q.; Cao, Y. Z.; Gao, H.; Xu, S. F.; Cong, X. L.; Yang, Y.; Wu, L. R.	Analgesics-assisted early functional exercise following minimally invasive total hip arthroplasty	2011	not published in English
Chin, Rp- H.; Ho, C. H.; Cheung, Lp- C.	Scheduled analgesic regimen improves rehabilitation after hip fracture surgery hip	2013	irrelevant topic; Non-RCT
	Comparison of tramadol/acetaminophen fixed-dose combination, tramadol, and acetaminophen in patients undergoing ambulatory arthroscopic meniscectomy	2018	irrelevant topic; Non-RCT
Shear, M. L.; Adler, J. N.; Shewakramani, S.; Ilgen, J.; Soremekun, O. A.; Nelson, S.; Thomas, S. H.	Transbuccal fentanyl for rapid relief of orthopedic pain in the ED	2010	non-surgical
Wang, G. D.; Yang, L. Y.; He, B.; Wang, Y. H.; Chen, Q.; Fan, L.	Effectiveness and safety of celecoxib combined with diacerein in the treatment of senile degenerative knee osteoarthritis: study protocol for a randomized controlled trial	2017	not published in English
Gadek, A.; Wordliczek, J.; Zajackowska, R.	Evaluation of analgesic efficacy of intra-articular opioids (morphine, fentanyl) after arthroscopic knee surgery	2012	review
Poplawski, S.; Johnson, M.; Philips, P.; Eberhart, L. H. J.; Koch, T.; Itri, L. M.	Use of Fentanyl Iontophoretic Transdermal System (ITS) (IONSYS) in the Management of Patients with Acute Postoperative Pain: a Case Series	2016	references reviewed
Wick, E. C.; Grant, M. C.; Wu, C. L.	Postoperative Multimodal Analgesia Pain Management With Nonopioid Analgesics and Techniques: A Review	2017	references reviewed

Morrison, R. S.; Dickman, E.; Hwang, U.; Akhtar, S.; Ferguson, T.; Huang, J.; Jeng, C. L.; Nelson, B. P.; Rosenblatt, M. A.; Silverstein, J. H.; Strayer, R. J.; Torrillo, T. M.; Todd, K. H.	Regional Nerve Blocks Improve Pain and Functional Outcomes in Hip Fracture: A Randomized Controlled Trial	2016	irrelevant comparison: block vs oral + iv
Zare, M. A.; Ghalyaie, A. H.; Fathi, M.; Farsi, D.; Abbasi, S.; Hafezimoghadam, P.	Oral oxycodone plus intravenous acetaminophen versus intravenous morphine sulfate in acute bone fracture pain control: a double-blind placebo- controlled randomized clinical trial	2014	work group exclusion; not drug combination used in practice
Chen, L. H.; Chen, C. H.; Lin, S. Y.; Chien, S. H.; Su, J. Y.; Huang, C. Y.; Wang, H. Y.; Chou, C. L.; Tsai, T. Y.; Cheng, Y. M.; Huang, H. T.	Aggressive continuous passive motion exercise does not improve knee range of motion after total knee arthroplasty	2013	non-RCT
Godoy Monzon, D.; Vazquez, J.; Jauregui, J. R.; Iserson, K. V.	Pain treatment in post-traumatic hip fracture in the elderly: regional block vs. systemic non-steroidal analgesics	2010	irrelevant comparison: NSAID vs block
Seers, K.; Crichton, N.; Tutton, L.; Smith, L.; Saunders, T.	Effectiveness of relaxation for postoperative pain and anxiety: randomized controlled trial	2008	<30 pts per group
Ikonomidou, E.; Rehnstrom, A.; Naesh, O.	Effect of music on vital signs and postoperative pain	2004	non musculoskeletal surgery
Grabow, L.	Controlled study of the analgetic effectivity of acupuncture	1994	Irrelevant topic; mixed non-target surgeries (abdominal, thoracic, spinal)
Yang, X.; Li, G. H.; Wang, H. J.; Wang, C. Y.	Continuous Passive Motion After Total Knee Arthroplasty: A Systematic Review and Meta-analysis of Associated Effects on Clinical Outcomes	2019	references reviewed
Jaspers, T.; Taeymans, J.; Hirschmuller, A.; Baur, H.; Hilfiker, R.; Rogan, S.	Continuous Passive Motion Does Improve Range of Motion, Pain and Swelling After ACL Reconstruction: A Systematic Review and Meta-Analysis	2019	References Reviewed
O'Connor, M.; Minkara, A. A.; Westermann, R. W.; Rosneck, J.; Lynch, T. S.	Return to Play After Hip Arthroscopy: A Systematic Review and Meta-analysis	2018	References Reviewed
Thrush, C.; Porter, T. J.; Devitt, B. M.	No evidence for the most appropriate postoperative rehabilitation protocol following anterior cruciate ligament reconstruction with concomitant articular cartilage lesions: a systematic review	2018	references reviewed
Ulger, O.; Yildirim Sahan, T.; Celik, S. E.	A systematic literature review of physiotherapy and rehabilitation approaches to lower-limb amputation	2018	references reviewed

Baloch, N.; Zubairi, A. J.; Rashid, R. H.; Hashmi, P. M.; Lakdawala, R. H.	Effect of continuous passive motion on knee flexion range of motion after total knee arthroplasty	2015	multimodal PT
Thomson, S.; Jukes, C.; Lewis, J.	Rehabilitation following surgical repair of the rotator cuff: a systematic review	2016	references reviewed
Joshi, R. N.; White, P. B.; Murray-Weir, M.; Alexiades, M. M.; Sculco, T. P.; Ranawat, A. S.	Prospective Randomized Trial of the Efficacy of Continuous Passive Motion Post Total Knee Arthroplasty: Experience of the Hospital for Special Surgery	2015	unclear treatment; unclear if motion is started early as PT started on differing days for each subject
Nikolaou, V. S.; Chytas, D.; Babis, G. C.	Common controversies in total knee replacement surgery: Current evidence	2014	references reviewed
He, M. L.; Xiao, Z. M.; Lei, M.; Li, T. S.; Wu, H.; Liao, J.	Continuous passive motion for preventing venous thromboembolism after total knee arthroplasty	2014	Review
Mano, S.; Palinkas, J.; Szabo, J.; Nagy, J. T.; Bako, K.; Csernatony, Z.	Application of a vibrating device for the prevention of flexion contracture after total knee arthroplasty	2015	work group exclusion; not comparison of interest
Herbold, J. A.; Bonistall, K.; Blackburn, M.; Agolli, J.; Gaston, S.; Gross, C.; Kuta, A.; Babyar, S.	Randomized controlled trial of the effectiveness of continuous passive motion after total knee replacement	2014	irrelevant comparison; continuous passive motion vs. standard PT regular course
Harvey, L. A.; Brosseau, L.; Herbert, R. D.	Continuous passive motion following total knee arthroplasty in people with arthritis	2014	references reviewed
Lobb, R.; Tumilty, S.; Claydon, L. S.	A review of systematic reviews on anterior cruciate ligament reconstruction rehabilitation	2012	references reviewed
Du Plessis, M.; Eksteen, E.; Jenneker, A.; Kriel, E.; Mentoor, C.; Stucky, T.; van Staden, D.; Morris, L. D.	The effectiveness of continuous passive motion on range of motion, pain and muscle strength following rotator cuff repair: a systematic review	2011	references reviewed
Garofalo, R.; Conti, M.; Notarnicola, A.; Maradei, L.; Giardella, A.; Castagna, A.	Effects of one-month continuous passive motion after arthroscopic rotator cuff repair: results at 1-year follow-up of a prospective randomized study	2010	irrelevant comparison; passive range of motion exercises vs. continuous passive motion
Corbett, K. L.; Reichmann, W. M.; Katz, J. N.; Beagan, C.; Corsello, P.; Ghazinouri, R.; Dang, B.; Mikulinsky, R.; Losina, E.; Wright, J.	One-Day vs Two-Day Epidural Analgesia for Total Knee Arthroplasty (TKA): A Retrospective Cohort Study	2010	non-RCT
Harvey, L. A.; Brosseau, L.; Herbert, R. D.	Continuous passive motion following total knee arthroplasty in people with arthritis	2010	Review

Baumgarten, K. M.; Vidal, A. F.; Wright, R. W.	Rotator Cuff Repair Rehabilitation: A Level I and II Systematic Review	2009	references reviewed
Matava, M. J.	Meniscal allograft transplantation: a systematic review	2007	non-RCT
Leach, W.; Reid, J.; Murphy, F.	Continuous passive motion following total knee replacement: a prospective randomized trial with follow-up to 1 year	2006	multimodal PT
Friemert, B.; Bach, C.; Schwarz, W.; Gerngross, H.; Schmidt, R.	Benefits of active motion for joint position sense	2006	irrelevant comparison; passive motion vs active motion
Brosseau, L.; Milne, S.; Wells, G.; Tugwell, P.; Robinson, V.; Casimiro, L.; Pelland, L.; Noel, M. J.; Davis, J.; Drouin, H.	Efficacy of continuous passive motion following total knee arthroplasty: a metaanalysis	2004	references reviewed
Milne, S.; Brosseau, L.; Robinson, V.; Noel, M. J.; Davis, J.; Drouin, H.; Wells, G.; Tugwell, P.	Continuous passive motion following total knee arthroplasty	2003	references reviewed
Davies, D. M.; Johnston, D. W.; Beaupre, L. A.; Lier, D. A.	Effect of adjunctive range-of-motion therapy after primary total knee arthroplasty on the use of health services after hospital discharge	2003	irrelevant topic; PT interventions, not early motion
Ververeli, P. A.; Sutton, D. C.; Hearn, S. L.; Booth, R. E., Jr.; Hozack, W. J.; Rothman, R. R.	Continuous passive motion after total knee arthroplasty. Analysis of cost and benefits	1995	non-RCT
Sharrock, N. E.; Urquhart, B. L.; Ganz, S.; Williams-Russo, P. G.	Epidural infusions of bupivacaine and fentanyl do not improve rehabilitation following one-stage bilateral total knee arthroplasty	1994	no full text available
McInnes, J.; Larson, M. G.; Daltroy, L. H.; Brown, T.; Fossel, A. H.; Eaton, H. M.; Shulman-Kirwan, B.; Steindorf, S.; Poss, R.; Liang, M. H.	A controlled evaluation of continuous passive motion in patients undergoing total knee arthroplasty	1992	irrelevant comparison; continuous passive motion vs. standard PT regular course
Hardt, S.; Schulz, M. R. G.; Pfitzner, T.; Wassilew, G.; Horstmann, H.; Lioudakis, E.; Weber-Spickschen, T. S.	Improved early outcome after TKA through an app-based active muscle training programme-a randomized-controlled trial	2018	irrelevant topic; app based active muscle training
Fitz, W.; Shukla, P.; Li, L.; Scott, R. D.	Early regain of function and proprioceptive improvement following knee arthroplasty	2018	irrelevant comparison; continuous passive motion vs. active motion
El Sayed, M.; Hassan, S.	Different routes of co-administration of magnesium sulphate with spinal anesthesia in knee arthroscopy: Randomized controlled trial	2017	irrelevant comparison; block vs IA mg sulfate

Laoruengthana, A.; Rattanaprichavej, P.; Rasamimongkol, S.; Galassi, M.	Anterior vs Posterior Periarticular Multimodal Drug Injections: A Randomized, Controlled Trial in Simultaneous Bilateral Total Knee Arthroplasty	2017	irrelevant comparison: periarticular - anterior vs posterior compartment
Denard, P. J.; L��ndermann, A.	Immediate versus delayed passive range of motion following total shoulder arthroplasty	2016	< 30 per target group
Song, M. H.; Kim, B. H.; Ahn, S. J.; Yoo, S. H.; Kang, S. W.; Kim, Y. J.; Kim, D. H.	Peri-articular injections of local anaesthesia can replace patient-controlled analgesia after total knee arthroplasty: a randomised controlled study	2016	irrelevant comparison; peri- articular injection vs. patient- controlled analgesia
Zhang, J.; Wang, Y.; Yang, G.; Liu, J.; Wang, J.	Effects of comprehensive rehabilitation training in combination with multi-mode analgesia on body function recovery after tumor-type knee replacement	2016	irrelevant topic; cancer
Chaudhry, H.; Bhandari, M.	Cochrane in CORR ��: Continuous Passive Motion Following Total Knee Arthroplasty in People With Arthritis (Review)	2015	review
Mau-Moeller, A.; Behrens, M.; Finze, S.; Bruhn, S.; Bader, R.; Mittelmeier, W.	The effect of continuous passive motion and sling exercise training on clinical and functional outcomes following total knee arthroplasty: A randomized active-controlled clinical study	2014	< 60 total pts
Paul, J. E.; Nantha-Aree, M.; Buckley, N.; Cheng, J.; Thabane, L.; Tidy, A.; DeBeer, J.; Winemaker, M.; Wismer, D.; Punthakee, D.; Avram, V.	Gabapentin does not improve multimodal analgesia outcomes for total knee arthroplasty: A randomized controlled trial	2013	repeat of 2623
YaDeau, J. T.; Goytizolo, E. A.; Padgett, D. E.; Liu, S. S.; Mayman, D. J.; Ranawat, A. S.; Rade, M. C.; Westrich, G. H.	Analgesia after total knee replacement: Local infiltration versus epidural combined with a femoral nerve blockade: A prospective, randomised pragmatic trial	2013	repeat of 2578
Nader, A.; Kendall, M. C.; Wixson, R. L.; Chung, B.; Polakow, L. M.; McCarthy, R. J.	A randomized trial of epidural analgesia followed by continuous femoral analgesia compared with oral opioid analgesia on short- and long-term functional recovery after total knee replacement	2012	irrelevant comparison: block vs oral
Alkire, M. R.; Swank, M. L.	Use of inpatient continuous passive motion versus no CPM in computer-assisted total knee arthroplasty	2010	multimodal PT
Ilfeld, B. M.; Ball, S. T.; Gearen, P. F.; Le, L. T.; Mariano, E. R.; Vandenborne, K.; Duncan, P. W.; Sessler, D. I.; Enneking, F. K.;	Ambulatory continuous posterior lumbar plexus nerve blocks after hip arthroplasty: A dual-center, randomized, triple-masked, placebo-controlled trial	2008	irrelevant comparison: overnight vs 4 day ambulatory lumbar plexus block



Shuster, J. J.; Theriaque, D. W.; Meyer, R. S.			
Lenssen, T. A. F.; Van Steyn, M. J. A.; Crijns, Y. H. F.; WaltjÃ©, E. M. H.; Roos, G. M.; Geesink, R. J. T.; Brandt, P. A. V. D.; De Bie, R. A.	Effectiveness of prolonged use of continuous passive motion (CPM), as an adjunct to physiotherapy, after total knee arthroplasty	2008	irrelevant comparison; CPM vs. PT regular course
Van Dijk, H. J. D.; Elvers, J. W. H.; Ruijter, A.; Oostendorp, R. A. B.	Effect of continuous passive motion after total knee arthroplasty: A systematic review	2007	irrelevant topic; cpm but not early motion
Smith, T. O.; Davies, L.	The efficacy of continuous passive motion after anterior cruciate ligament reconstruction: A systematic review	2007	references reviewed
Handoll, H. H.; Madhok, R.; Howe, T. E.	Rehabilitation for distal radial fractures in adults	2002	references reviewed
Davies, S.	Effects of continuous passive movement and plaster of Paris after internal fixation of ankle fractures	1991	<30 pts per group
Harms, M.; Engstrom, B.	Continuous passive motion as an adjunct to treatment in the physiotherapy management of the total knee arthroplasty patient	1991	multimodal PT
Wang, T. J.; Chang, C. F.; Lou, M. F.; Ao, M. K.; Liu, C. C.; Liang, S. Y.; Wu, S. F.; Tung, H. H.	Biofeedback relaxation for pain associated with continuous passive motion in Taiwanese patients after total knee arthroplasty	2015	irrelevant topic: biofeedback
Chen, L. H.; Chen, C. H.; Lin, S. Y.; Chien, S. H.; Su, J. Y.; Huang, C. Y.; Wang, H. Y.; Chou, C. L.; Tsai, T. Y.; Cheng, Y. M.; et al.,	Aggressive continuous passive motion exercise does not improve knee range of motion after total knee arthroplasty	2013	multimodal PT
Luo, S. M.; Liao, Y. M.; Chen, L.; Huang, Y.; Zhou, L.; Tang, J.	Effect of continuous passive motion on blood coagulation condition in patients with total knee joint replacement	2012	not published in English
Johnson, D. P.; Eastwood, D. M.	Beneficial effects of continuous passive motion after total condylar knee arthroplasty	1992	< 60 total pts
LaStayo, P. C.; Wright, T. W.; Jaffe, R.	Continuous passive motion after rotator cuff repair: a prospective outcome study	1997	<60 total pts
Lenssen, A. F.; Bie, Rd; Bulstra, S. K.; Steyn, MJAv	Continuous passive motion (CPM) in rehabilitation following total knee arthroplasty: a randomised controlled trial	2003	<60 total pts

Pinczewski, L.; Witherow, G.; Bollen, S.	A comparative study on the use of continuous passive motion after endoscopic anterior cruciate ligament reconstruction in 216 patients	1995	non-RCT
Nct,	Comparative Study of Prophylactic Agent for Venous Thromboembolism After Total Knee Arthroplasty	2014	irrelevant comparison: Aspirin vs rivaroxaban
Yun, J. Y.; Lee, J. K.	Effects of a Thera-Band Exercise Program on Pain, Knee Flexion ROM, and Psychological Parameters Following Total Knee Arthroplasty	2015	not published in English
Nct,	Influence of Virtual Reality Games on Knee Proprioception After Anterior Cruciate Ligament Reconstruction (ACLR)	2019	irrelevant topic; exercise rehab
Louw, A.; Puentedura, E. J.; Reed, J.; Zimney, K.; Grimm, D.; Landers, M. R.	A controlled clinical trial of preoperative pain neuroscience education for patients about to undergo total knee arthroplasty	2019	irrelevant topic; pre-admission education; not periop window
Alleva, R.; Togni <sup>1</sup> , A.; Tomasetti, M.; Benassi, M. S.; Pazzaglia, L.; van Oven, H.; Vigan <sup>2</sup> , E.; De Simone, N.; Pacini, I.; Giannone, S.; et al.,	Effect of different anaesthetic techniques on gene expression profiles in patients who underwent hip arthroplasty	2019	irrelevant comparison; block vs general
Tanaka, R.; Hayashizaki, T.; Taniguchi, R.; Kobayashi, J.; Umehara, T.	Effect of an intensive functional rehabilitation program on the recovery of activities of daily living after total knee arthroplasty: A multicenter, randomized, controlled trial	2020	irrelevant topic; pt protocol
Liu, P.; Mu, X.; Zhang, Q.; Liu, Z.; Wang, W.; Guo, W.	Should compression bandage be performed after total knee arthroplasty? A meta-analysis of randomized controlled trials	2020	References Reviewed
Kolaczko, J. G.; Knapik, D. M.; Salata, M. J.	Peri-operative pain management in hip arthroscopy: A systematic review of the literature	2020	no comparison of interest
Nirmal, A.; Singh, Y.; Mathur, S. K.; Patel, S.	Comparison between intrathecal nalbuphine and butorphanol as adjuvants to isobaric ropivacaine in elective lower limb orthopedic surgeries: A prospective, randomized, double blind study	2019	work group exclusion; intervention not used in US
Wan, R. J.; Liu, S. F.; Kuang, Z. P.; Ran, Q.; Zhao, C.; Huang, W.	Influence of Ketorolac Supplementation on Pain Control for Knee Arthroscopy: A Meta-Analysis of Randomized Controlled Trials	2020	References Reviewed
Glomset, J. L.; Kim, E.; Tokish, J. M.; Renfro, S. D.; Seckel, T. B.; Adams, K. J.; Folk, J.	Reduction of Postoperative Hip Arthroscopy Pain With an Ultrasound-Guided Fascia Iliaca Block: A Prospective Randomized Controlled Trial	2020	work group exclusion; not population of interest
van der Merwe, J. M.; Mastel, M. S.	Controversial Topics in Total Knee Arthroplasty: A 5-Year Update (Part 1)	2020	References Reviewed
Okorooha, K. R.; Ussef, N.; Jildeh, T. R.; Khalil, L. S.; Hasan, L.; Bench, C.; Zeni, F.; Eller, E.; Moutzouros, V.	Comparison of Tendon Lengthening With Traditional Versus Accelerated Rehabilitation After Achilles Tendon Repair: A Prospective Randomized Controlled Trial	2020	<60 total pts

Nahhas, C. R.; Hannon, C. P.; Yang, J.; Gerlinger, T. L.; Nam, D.; Della Valle, C. J.	Education Increases Disposal of Unused Opioids After Total Joint Arthroplasty: A Cluster-Randomized Controlled Trial	2020	irrelevant topic; pre-admission education; not periop window
Zhu, T.; Gao, Y.; Xu, X.; Fu, S.; Lin, W.; Sun, J.	Effect of Ketamine Added to Ropivacaine in Nerve Block for Postoperative Pain Management in Patients Undergoing Anterior Cruciate Ligament Reconstruction: a Randomized Trial	2020	<30 pts per group
Kheirabadi, D.; Safavi, M. R.; Taghvaei, M.; Habibzadeh, M. R.; Honarmand, A.	Comparing the prophylactic effects of oral gabapentin, pregabalin, and celecoxib on postoperative pain management in orthopedic surgery of the lower extremity: A double-blind randomized controlled trial	2020	<30 pts per group
Jiang, M.; Deng, H.; Chen, X.; Lin, Y.; Xie, X.; Bo, Z.	The efficacy and safety of selective COX-2 inhibitors for postoperative pain management in patients after total knee/hip arthroplasty: a meta-analysis	2020	References Reviewed
Sahin, G.; Basak, T.	The Effects of Intraoperative Progressive Muscle Relaxation and Virtual Reality Application on Anxiety, Vital Signs, and Satisfaction: A Randomized Controlled Trial	2020	no outcomes of interest; cognitive measures
Zhuang, Q.; Tao, L.; Lin, J.; Jin, J.; Qian, W.; Bian, Y.; Li, Y.; Dong, Y.; Peng, H.; Li, Y.; Fan, Y.; Wang, W.; Feng, B.; Gao, N.; Sun, T.; Lin, J.; Zhang, M.; Yan, S.; Shen, B.; Pei, F.; Weng, X.	Postoperative intravenous parecoxib sodium followed by oral celecoxib post total knee arthroplasty in osteoarthritis patients (PIPFORCE): a multicentre, double-blind, randomised, placebo-controlled trial	2020	irrelevant treatment; NSAID combination
Londhe, S.; Patwardhan, M.; Shah, R.; Oak, M.	Efficacy and Safety of Buprenorphine Transdermal Patch for Immediate Postoperative Analgesia After Total Knee Arthroplasty Surgery	2020	work group exclusion; not drug combination used in practice
Nicolino, T. I.; Costantini, J.; Carb��, L.	Complementary Saphenous Nerve Block to Intra-Articular Analgesia Reduces Pain After Total Knee Arthroplasty: A Prospective Randomized Controlled Trial	2020	irrelevant comparison; block vs placebo
Cai, A. L.; Liu, S. J.; Wu, B.; Liu, G.	Intrathecal versus local infiltration analgesia for pain control in total joint arthroplasty	2020	References Reviewed
Hayden, R.; Rucinski, K.; Crecelius, C. R.; Stucky, R.; Stannard, J. P.; Cook, J. L.	Outcomes associated with behavioral evaluation and counseling for patients undergoing orthopaedic surgery - A systematic review	2020	irrelevant topic; behavioral risk factors
L��tzner, J.; Gehring, R.; Beyer, F.	Slightly better pain relief but more frequently motor blockade with combined nerve block analgesia compared to continuous intraarticular analgesia after total knee arthroplasty	2020	irrelevant comparison; block vs IV infusion

Schubert, J.; Lambers, K. T. A.; Kimber, C.; Denk, K.; Cho, M.; Doornberg, J. N.; Jaarsma, R. L.	Effect on Overall Health Status With Weightbearing at 2 Weeks vs 6 Weeks After Open Reduction and Internal Fixation of Ankle Fractures	2020	<60 total pts
Aprato, A.; Audisio, A.; Santoro, A.; Grosso, E.; Devivo, S.; Berardino, M.; Mass`A, A.	Fascia-iliaca compartment block vs intra-articular hip injection for preoperative pain management in intracapsular hip fractures: A blind, randomized, controlled trial	2018	no target outcomes; preop measurements only
Ito, Y.; Deie, M.; Adachi, N.; Kobayashi, K.; Kanaya, A.; Miyamoto, A.; Nakasa, T.; Ochi, M.	A prospective study of 3-day versus 2-week immobilization period after anterior cruciate ligament reconstruction	2007	<60 total pts
Carvalho, F. A.; Kamper, S. J.	Effects of early rehabilitation following operative repair of Achilles tendon rupture (PEDro synthesis)	2016	No references
DiStasio, A. J., 2nd; Jaggars, F. R.; DePasquale, L. V.; Frassica, F. J.; Turen, C. H.	Protected early motion versus cast immobilization in postoperative management of ankle fractures	1994	<30 pts per group
Shyu, Y. I.; Liang, J.; Tseng, M. Y.; Li, H. J.; Wu, C. C.; Cheng, H. S.; Chou, S. W.; Chen, C. Y.; Yang, C. T.	Comprehensive and subacute care interventions improve health-related quality of life for older patients after surgery for hip fracture: a randomised controlled trial	2013	irrelevant topic; geriatric care models
De Bellis, U. G.; Legnani, C.; Calori, G. M.	Acute total hip replacement for acetabular fractures: a systematic review of the literature	2014	irrelevant topic; surgery as treatment
Day, G. A.; Swanson, C.; Yelland, C.; Broome, J.; Dimitri, K.; Massey, L.; Richardson, H.; Marsh, A.	Surgical outcomes of a randomized prospective trial involving patients with a proximal femoral fracture	2001	irrelevant topic; geriatric care models

<p>Memtsoudis, S. G.; Cozowicz, C.; Bekeris, J.; Bekere, D.; Liu, J.; Soffin, E. M.; Mariano, E. R.; Johnson, R. L.; Hargett, M. J.; Lee, B. H.; Wendel, P.; Brouillette, M.; Go, G.; Kim, S. J.; Baaklini, L.; Wetmore, D.; Hong, G.; Goto, R.; Jivanelli, B.; Argyra, E.; Barrington, M. J.; Borgeat, A.; De Andres, J.; Elkassabany, N. M.; Gautier, P. E.; Gerner, P.; Gonzalez Della Valle, A.; Goytizolo, E.; Kessler, P.; Kopp, S. L.; Lavand'Homme, P.; MacLean, C. H.; Mantilla, C. B.; MacIsaac, D.; McLawhor</p>	<p>Anaesthetic care of patients undergoing primary hip and knee arthroplasty: consensus recommendations from the International Consensus on Anaesthesia-Related Outcomes after Surgery group (ICAROS) based on a systematic review and meta-analysis</p>	<p>2019</p>	<p>irrelevant comparison; neuraxial anesthesia vs placebo</p>
<p>Nelson, W. E.; Henderson, R. C.; Almekinders, L. C.; DeMasi, R. A.; Taft, T. N.</p>	<p>An evaluation of pre- and postoperative nonsteroidal antiinflammatory drugs in patients undergoing knee arthroscopy. A prospective, randomized, double-blinded study</p>	<p>1993</p>	<p>Published before 2010</p>
<p>Beynon, B. D.; Johnson, R. J.; Naud, S.; Fleming, B. C.; Abate, J. A.; Brattbakk, B.; Nichols, C. E.</p>	<p>Accelerated versus nonaccelerated rehabilitation after anterior cruciate ligament reconstruction: a prospective, randomized, double-blind investigation evaluating knee joint laxity using roentgen stereophotogrammetric analysis</p>	<p>2011</p>	<p>&lt;30 pts per group</p>
<p>Tal-Akabi, A.; Steiger, U.; Villiger, P. M.</p>	<p>Neuromuscular adaptation to early post-operative, high-intensity, short resistance training of non-operated lower extremity in elderly patients: a randomized controlled trial</p>	<p>2007</p>	<p>irrelevant topic; resistance training</p>
<p>Sepucha, K.; Bedair, H.; Yu, L.; Dorrwachter, J. M.; Dwyer, M.; Talmo, C. T.; Vo, H.; Freiberg, A. A.</p>	<p>Decision Support Strategies for Hip and Knee Osteoarthritis: Less Is More: A Randomized Comparative Effectiveness Trial (DECIDE-OA Study)</p>	<p>2019</p>	<p>irrelevant topic; decision aids</p>
<p>Peng, X. Q.; Fei, Z. G.; Sun, C. G.; Zhou, Q. J.</p>	<p>Efficacy and safety of local infiltration analgesia for pain management in total knee and hip arthroplasty: A meta-analysis of randomized controlled trial</p>	<p>2020</p>	<p>References Reviewed</p>
<p>Saltzman, B. M.; Cvetanovich, G. L.; Nwachukwu, B. U.; Mall, N. A.; Bush-Joseph, C. A.; Bach, B. R., Jr.</p>	<p>Economic Analyses in Anterior Cruciate Ligament Reconstruction: A Qualitative and Systematic Review</p>	<p>2016</p>	<p>irrelevant topic; cost of surgery, not analgesia</p>

Ryan, M. G.; Westrich, G. H.; Potter, H. G.; Sharrock, N.; Maun, L. M.; Macaulay, W.; Katkin, P.; Sculco, T. P.; Salvati, E. A.	Effect of mechanical compression on the prevalence of proximal deep venous thrombosis as assessed by magnetic resonance venography	2002	no outcomes of interest
Sigurdsson, E.; Siggeirsdottir, K.; Jonsson, H., Jr.; Gudnason, V.; Matthiasson, T.; Jonsson, B. Y.	Early discharge and home intervention reduces unit costs after total hip replacement: results of a cost analysis in a randomized study	2008	irrelevant comparison; home vs inpatient
Russo, L. R.; Benedetti, M. G.; Mariani, E.; Roberti di Sarsina, T.; Zaffagnini, S.	The Videoinight(Â®) Method: improving early results following total knee arthroplasty	2017	work group exclusion; COI
Paravlic, A. H.; Tod, D.; Milanovic, Z.	Mental simulation practice has beneficial effects on patients' physical function following lower limb arthroplasty: a systematic review and meta-analysis	2020	References Reviewed
Reuben, S. S.; Buvenandran, A.; Katz, B.; Kroin, J. S.	A prospective randomized trial on the role of perioperative celecoxib administration for total knee arthroplasty: improving clinical outcomes	2008	published before 2010
Littlewood, C.; Bateman, M.; Clark, D.; Selfe, J.; Watkinson, D.; Walton, M.; Funk, L.	Rehabilitation following rotator cuff repair: a systematic review	2015	References Reviewed
Fournier, R.; Van Gessel, E.; Macksay, M.; Gamulin, Z.	Onset and offset of intrathecal morphine versus nalbuphine for postoperative pain relief after total hip replacement	2000	<60 total pts
Kukreja, P.; Talbott, K.; MacBeth, L.; Ghanem, E.; Sturdivant, A. B.; Woods, A.; Potter, W. A.; Kalagara, H.	Effects of Music Therapy During Total Knee Arthroplasty Under Spinal Anesthesia: A Prospective Randomized Controlled Study	2020	<30 pts per group
Temporiti, F.; Draghici, I.; Fusi, S.; Traverso, F.; Ruggeri, R.; Grappiolo, G.; Gatti, R.	Does walking the day of total hip arthroplasty speed up functional independence? A non-randomized controlled study	2020	non-rct
Essex, M. N.; Camu, F.; Borgeat, A.; Salomon, P. A.; Pan, S.; Cheung, R.	The relationship between postoperative opioid consumption and the incidence of hypoxemic events following total hip arthroplasty: a post hoc analysis	2020	No outcomes of interest
Onggo, J. R.; Onggo, J. D.; De Steiger, R.; Hau, R.	The Efficacy and Safety of Inpatient Rehabilitation Compared With Home Discharge After Hip or Knee Arthroplasty: A Meta-Analysis and Systematic Review	2019	irrelevant comparison; home vs inpatient
Fatoye, F.; Wright, J. M.; Yeowell, G.; Gebrye, T.	Clinical and cost-effectiveness of physiotherapy interventions following total hip replacement: a systematic review and meta-analysis	2020	irrelevant topic; PT efficacy

<p>Classen, Aom; Schers, H. J.; Busch, Vjff; Heesterbeek, P. J. C.; van den Hoogen, F. H. J.; Vliet Vlieland, T. P. M.; van den Ende, C. H. M.</p>	<p>Preparing for an orthopedic consultation using an eHealth tool: a randomized controlled trial in patients with hip and knee osteoarthritis</p>	<p>2020</p>	<p>irrelevant topic; pre-admission education; not periop window</p>
<p>Cimino, A. M.; Veazey, G. C.; McMurtrie, J. T.; Isbell, J.; Arguello, A. M.; Brabston, E. W.; Ponce, B. A.; Momaya, A. M.</p>	<p>The Effect of Corticosteroid Injections on Clinical Outcomes and Failure Rates after Rotator Cuff Repair: A Systematic Review</p>	<p>2020</p>	<p>irrelevant topic; corticosteroids</p>
<p>Buvanendran, A.; Kroin, J. S.; Tuman, K. J.; Lubenow, T. R.; Elmofly, D.; Moric, M.; Rosenberg, A. G.</p>	<p>Effects of Perioperative Administration of a Selective Cyclooxygenase 2 Inhibitor on Pain Management and Recovery of Function after Knee Replacement: A Randomized Controlled Trial</p>	<p>2003</p>	<p>published before 2010</p>
<p>DeJong, G.; Hsieh, C. J.; Vita, M. T.; Zeymo, A.; Boucher, H. R.; Thakkar, S. C.</p>	<p>Innovative Devices Did Not Provide Superior Total Knee Arthroplasty Outcomes in Post-Operative Rehabilitation: Results From a Four-Arm Randomized Clinical Trial</p>	<p>2020</p>	<p>irrelevant topic; warm-up modality, also beyond periop window</p>
<p>Hiemstra, L. A.; Heard, S. M.; Sasyniuk, T. M.; Buchko, G. L.; Reed, J. G.; Monteleone, B. J.</p>	<p>Knee immobilization for pain control after a hamstring tendon anterior cruciate ligament reconstruction: A randomized clinical trial</p>	<p>2009</p>	<p>irrelevant topic; brace methods</p>
<p>Fasulo, S. M.; Testa, E. J.; Lawler, S. M.; Fitzgerald, M.; Lowe, J. T.; Jawa, A.</p>	<p>A Preoperative Educational Video Improves Patient Satisfaction and Perceived Knowledge, but Not Patient Understanding for Total Shoulder Arthroplasty: A Randomized, Surgeon-Blinded Study</p>	<p>2018</p>	<p>irrelevant topic; pre-admission education; not periop window</p>
<p>Akinci, S. B.; SaricaoÇŞlu, F.; Atay, O. A.; Doral, M. N.; Kanbak, M.</p>	<p>Analgesic effect of intra-articular tramadol compared with morphine after arthroscopic knee surgery</p>	<p>2005</p>	<p>&lt;30 pts per group</p>
<p>Hill, A. M.; Crisp, C. C.; Shatkin-Margolis, A.; Tam, T.; Yook, E.; Kleeman, S.; Pauls, R. N.</p>	<p>The Influence of Postoperative Environment on Patient Pain and Satisfaction: A Randomized Trial</p>	<p>2020</p>	<p>not target population; vaginal surgery</p>
<p>Wong, E. M.; Chan, S. W.; Chair, S. Y.</p>	<p>The effect of educational intervention on pain beliefs and postoperative pain relief among Chinese patients with fractured limbs</p>	<p>2010</p>	<p>work group exclusion; not generalizable study population</p>
<p>van Seventer, R.; Bach, F. W.; Toth, C. C.; Serpell, M.; Temple, J.; Murphy, T. K.; Nimour, M.</p>	<p>Pregabalin in the treatment of post-traumatic peripheral neuropathic pain: a randomized double-blind trial</p>	<p>2010</p>	<p>mixed population; includes non-surgical pts</p>
<p>Dullenkopf, A.; Muller, R.; Dillmann, F.; Wiedemeier, P.; Hegi, T. R.; Gautschi, S.</p>	<p>An intraoperative pre-incision single dose of intravenous ketamine does not have an effect on postoperative analgesic requirements under clinical conditions</p>	<p>2009</p>	<p>mixed population; 63% general surgery</p>

Grond, S.; Hall, J.; Spacek, A.; Hoppenbrouwers, M.; Richarz, U.; Bonnet, F.	Iontophoretic transdermal system using fentanyl compared with patient-controlled intravenous analgesia using morphine for postoperative pain management	2007	mixed population; includes abdominal surgery
Barber, M.; Braid, V.; Mitchell, S. L.; Martin, B. J.; Grant, S. J.; Granat, M.; Stott, D. J.	Electrical stimulation of quadriceps during rehabilitation following proximal femoral fracture	2002	non-rct
Nahm, Eun-Shim; Stevens, Lena; Scott, Pamela; Gorman, Kristy	Effects of a web-based preoperative education program for patients undergoing ambulatory surgery: a preliminary study	2012	irrelevant topic; pre-admission education; not periop window
Finlay, Katherine A.; Wilson, John A.; Gaston, Paul; Al-Dujaili, Emad A. S.; Power, Ian	Post-operative pain management through audio-analgesia: Investigating musical constructs	2016	<30 pts per group



## **AAOS Approval Bodies**

### **Committee on Evidence Based Quality and Value**

The committee on Evidence Based Quality and Value (EBQV) consists of twenty-three AAOS members who implement evidence-based quality initiatives such as clinical practice guidelines (CPGs), systematic literature reviews (SRs) and appropriate use criteria (AUCs). They also oversee the dissemination of related educational materials and promote the utilization of orthopaedic value products by the Academy's leadership and its members.

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