

# Supplement to the Management of Rotator Cuff Injuries Clinical Practice Guideline

## e-Appendix 1

- Background
- PICO Questions
- AAOS Approval Bodies
- Literature Search Strategies
- Peer Review/Public Comment Details

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

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## **Appendix II**

# **AAOS BODIES THAT APPROVED THIS SYSTEMATIC LITERATURE REVIEW**

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

The committee on Evidence Based Quality and Value (EBQV) consists of twenty 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.

### **Council on Research and Quality**

The Council on Research and Quality promotes ethically and scientifically sound clinical and translational research to sustain patient care in musculoskeletal disorders. The Council also serves as the primary resource for educating its members, the public, and public policy makers regarding evidenced-based medical practice, orthopaedic devices and biologics, regulatory pathways and standards development, patient safety, occupational health, technology assessment, and other related important errors.

The Council is comprised of the chairs of the committees on Biological Implants, Biomedical Engineering, Occupational Health and Workers' Compensation, Patient Safety, Research Development, U.S. Bone and Joint Decade, and chair and Appropriate Use Criteria and Guidelines section leaders of the Evidence Based Quality and Value committee. Also on the Council are the second vice-president, three members at large, and representatives of the Diversity Advisory Board, Women's Health Issues Advisory Board, Board of Specialty Societies (BOS), Board of Councilors (BOC), Communications Cabinet, Orthopaedic Research Society (ORS), Orthopedic Research and Education Foundation (OREF).

### **Board of Directors**

The 17 member Board of Directors manage the affairs of the AAOS, set policy, and oversee the Strategic Plan.

## STUDY INCLUSION CRITERIA

**CRITERIA TO BE CUSTOMIZED BY WORK GROUP** (by PICO question or stage of care, if necessary)

- Study must be of an <Rotator Cuff> injury or prevention thereof
- Study must be published in or after <1990> for *surgical treatment, rehabilitation, bracing, prevention and MRI*
- Study must be published in or after <1990> for *x rays and non-operative treatment*
- Study must be published in or after <1990> for all others non specified
- Study should have 10 or more patients per group (*Work group may further define sample size*)
- For surgical outcome a minimum of 12 months follow up duration.
- For pain management no minimum follow up duration.
- For non-operative injections a minimum of 4 weeks follow up duration.
- Antibiotic prophylaxis, anticoagulation, mode of anesthesia: all follow-ups
- For *non-operative treatment* a minimum of 4 weeks follow-up.

### Standard Criteria for all CPGs

- 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).
- Retrospective non-comparative case series, medical records review, meeting abstracts, historical articles, editorials, letters, and commentaries are **excluded**.
- Confounded studies (i.e. studies that give patients the treatment of interest AND another treatment) are **excluded**.
- Case series studies that have non-consecutive enrollment of patients 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 Weak” strength of evidence are **excluded**.
- All studies evaluated as Level V will be **excluded**.
- Composite measures or outcomes are **excluded** even if they are patient-oriented.
- Study must appear in a peer-reviewed publication
- For any included study that uses “paper-and-pencil” outcome measures (e.g., SF-36), only those outcome measures that have been validated will be included
- For any given follow-up time point in any included study, there must be ≥ 50% patient follow-up (if the follow-up is >50% but <80%, the study quality will be downgraded by one Level)
- 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

We will only evaluate surrogate outcomes when no patient oriented outcomes are available.

**Best Available Evidence**

When examining primary studies, we will analyze the best available evidence regardless of study design. We will first consider randomized controlled trials identified by the search strategy. In the absence of two or more RCTs, we will sequentially search for prospective controlled trials, prospective comparative studies, retrospective comparative studies, and prospective case-series studies. Only studies of the highest level of available evidence are included, assuming that there were 2 or more studies of that higher level. For example, if there are two Level II studies that address the recommendation, Level III and IV studies are not included.

## PICO QUESTIONS

1. In patients 18 years of age and older with full thickness rotator cuff tears and no previous shoulder surgery, does rotator cuff repair improve patient outcomes compared to non-operative treatment?
  - a. Intervention
    - i. Open repair
    - ii. Arthroscopic repair
    - iii. Mini-open repair
  - b. Comparison
    - i. Operative vs. non-operative
    - ii. Non-surgical: with or without rehabilitation, home program, supervised program, with or without injection
2. In adult patients (18 and over) who are undergoing a primary full thickness rotator cuff repair, does addressing concomitant shoulder pathology (symptomatic or radiographic) improve outcomes compared to isolated cuff repair?
  - a. Intervention
    - i. Acromioplasty (subacromial decompression)
    - ii. Labral debridement
    - iii. SLAP repair
    - iv. Distal clavicle resection/coplaning
    - v. Biceps tenodesis or tenotomy
    - vi. Chondroplasty or cartilage restoration
  - b. Comparison
    - i. No concomitant treatment, benign neglect
3. For patients with symptoms consistent with rotator cuff pathology, what is the diagnostic value of history, or physical exam, and what are the indications for soft-tissue imaging in the accurate diagnosis of rotator cuff tears?
  - a. Intervention
    - i. History
    - ii. MRI and ultrasound
    - iii. Physical exams
  - b. Comparison
    - i. Versus each other (i.e. physical exam vs. history vs. imaging)
4. In adult patients (18 and over) who have undergone a primary rotator cuff repair, does the time of post-operative mobilization affect outcomes?
  - a. Intervention
    - i. Post-operative early passive motion/mobilization
  - b. Comparison
    - i. Post-operative delayed motion/mobilization
5. In adult patients (18 and over) who have undergone a primary rotator cuff repair, does supervised exercise programs offer improved outcomes as compared to unsupervised exercise programs?

- a. Intervention
    - i. Supervised exercise program
  - b. Comparison
    - i. Unsupervised exercise program
    - ii. No therapy
- 6. In adult patients (18 and over) with rotator cuff pathology undergoing non-operative treatment, what is the effect of various injections on patient outcomes?
  - a. Intervention
    - i. Injections
    - ii. Corticosteroid
    - iii. PRP (Platelet-Rich Plasma)
    - iv. Minimally manipulated MSC (Mesenchymal Stem Cell Augmentation)
    - v. Prolotherapy
    - vi. Non-steroidal injections (e.g. Ketorolac)
  - b. Comparison
    - i. Placebo
    - ii. Each other
    - iii. Physical therapy
    - iv. Oral NSAIDs
    - v. Oral steroids
- 7. In adult patients (18 and over) with partial rotator cuff tears who have failed non-operative treatments, does surgical repair result in improved outcomes compared with debridement?
  - a. Intervention
    - i. Repair
    - ii. Transtendinous/In-situ
    - iii. Takedown or conversion to full-thickness
  - b. Comparison
    - i. Debride
    - ii. Acromioplasty
    - iii. Vs. each other
- 8. In adult patients (18 and over) with full thickness rotator cuff tears who are undergoing surgical treatment, what are modifiable and unmodifiable risk factors that affect surgical outcomes?
  - a. Intervention (Prognostic factors)
    - i. Nicotine products
    - ii. BMI
    - iii. Diabetes
    - iv. Cholesterol
    - v. Compliance
    - vi. Malnutrition
    - vii. Behavioral health (anxiety, depression)
    - viii. Anabolic steroids
    - ix. Corticosteroid (oral/injectable)

- x. Comorbidities
  - xi. Litigation
  - xii. Patient expectations/motivations
  - xiii. DMARDs
  - xiv. Hepatitis C
  - xv. Frozen shoulder
  - xvi. NSAIDs
  - xvii. HIV
  - xviii. Socioeconomic Status (SES)
  - xix. Age
  - xx. Sex
  - xxi. Cirrhosis
  - xxii. Kidney disease
- b. Comparison
  - i. No risk factor
- 9. In adult patients (18 and over) with full thickness rotator cuff tears who are undergoing surgical treatment, which ancillary surgical techniques result in improved patient outcomes?
  - a. Intervention
    - i. Single row vs. double row vs. transosseous (anchors and no anchors)
    - ii. Open vs arthroscopic
    - iii. Knot vs. knotless
    - iv. Marrow stimulation with repair
    - v. Biologics with repair (PRP, stem cells, biologic patch)
  - b. Comparison
    - i. Versus each other
- 10. In adult patients (18 and over) with massive irreparable rotator cuff tears without arthropathy, which intervention improves outcome?
  - a. Intervention
    - i. Arthroscopic partial repair
    - ii. Tendon transfer
    - iii. Pectoralis major transfer
    - iv. Trapezius transfer
    - v. Latissimus Dorsal transfer
    - vi. Reverse Shoulder
    - vii. Interpositional graft
    - viii. Superior capsular reconstruction
    - ix. Fascial augmentation
    - x. Debridement
    - xi. Biceps Tenotomy
  - b. Comparison
    - i. Vs. each other
    - ii. Non-operative treatment
- 11. In adult patients (18 and over) with massive irreparable rotator cuff tears with arthropathy, which intervention improves outcome?



- a. Intervention
    - i. Reversal with and without tendon transfer
    - ii. Debridement
    - iii. Hemiarthroplasty
  - b. Comparison
    - i. Vs. each other
    - ii. Non-operative treatment
12. In adult patients (18 and over) with rotator cuff pathology who have undergone surgical treatment which postoperative nonnarcotic pain management modalities are most effective for pain management?
- a. Intervention
    - i. Regional block
    - ii. Non-steroidals
    - iii. Gabapentin
    - iv. Pain pumps/catheter
    - v. Cryotherapy
    - vi. Liposomal bupivacaine
    - vii. TENs
    - viii. Acupuncture
    - ix. Perioperative steroids
    - x. Acetaminophen (IV/oral)
    - xi. Intraoperative steroids
    - xii. Multimodal programs
  - b. Comparison
    - i. Post-operative opioid use

# LITERATURE SEARCH STRATEGIES

## For PRISMA Diagram

Records identified through database searching: 14,372

Records after duplicates removed: 10,619

Additional records identified through other sources (bib searches):

Records screened: 10,619

## LITERATURE SEARCHES

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 systematic review development group's preliminary recommendations. Bibliographies of relevant systematic reviews were hand searched for additional references. All databases were last searched on June 6, 2018 with limits for publication dates from 1990-2018 and English language.

## APPENDIX

### Literature Search Strategies

**Database:** MEDLINE In-Process & Other Non-Indexed Citations, MEDLINE Daily and MEDLINE (1946 to Present)

**Interface:** Ovid

**Date searched:** June 6, 2018

LINE	SEARCH SYNTAX
#1	("Rotator Cuff Injuries" or "Rotator Cuff Tear Arthropathy").sh.
#2	(rotator cuff injur* or 'rotator cuff tear' or 'rotator cuff tears' or ('rotator cuff' adj3 repair) or ('rotator cuff' adj3 rupture*)).ab,ti,kf.
#3	(animals not humans).sh.
#4	cadaver.sh. or cadaver*.ti.
#5	(comment or editorial or letter or historical article or addresses or news or newspaper article or case reports).pt. or case report.ti.
#6	3 or 4 or 5
#7	Rotator Cuff/ab, dg, de, pa, pp, su [Abnormalities, Diagnostic Imaging, Drug Effects, Pathology, Physiopathology, Surgery]
#8	1 or 7 or 2
#9	8 not 6
#10	limit 9 to (english language and yr="1990 -Current")

**Database:** Embase

**Interface:** Embase.com (Elsevier)

**Date searched:** June 6, 2018

LINE	SEARCH SYNTAX
#1	'rotator cuff injury'/exp OR 'rotator cuff'/exp
#2	((('rotator cuff') NEAR/3 (injur* OR tear OR tears OR repair OR rupture)):ti,ab

<b>#3</b>	'cadaver'/de OR 'in vitro study'/exp OR 'animal experiment'/de OR 'animal model'/de OR 'nonhuman'/de OR 'abstract report'/de OR 'book'/de OR 'editorial'/de OR 'note'/de OR 'letter'/de OR 'case study'/de OR 'case report'/de OR 'conference abstract'/it OR 'chapter'/it OR 'medical record review'/de OR 'conference paper'/it OR 'conference review'/it OR 'editorial'/it OR 'letter'/it OR 'note'/it
<b>#4</b>	#1 OR #2 NOT #3
<b>#5</b>	#1 OR #2 NOT #3 AND [english]/lim AND [1990-2018]/py

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

**Interface:** Wiley

**Date searched:** June 6, 2018

LINE	SEARCH SYNTAX
<b>#1</b>	[mh "Rotator Cuff"]
<b>#2</b>	[mh "Rotator Cuff Injuries"]
<b>#3</b>	"rotator cuff":ti,ab
<b>#4</b>	(injur* or tear or tears or repair or rupture):ti,ab
<b>#5</b>	#3 and #4
<b>#6</b>	"conference abstract":pt
<b>#7</b>	#1 or #2 or #5 not #6, Publication Year from 1990 to 2018

June 26, 2017: De-duplicated and 9,464 references imported to PEER

June 6, 2018: De-duplicated and 1,155 references imported to PEER

## Medline via Ovid

**Database:** MEDLINE In-Process & Other Non-Indexed Citations, MEDLINE Daily and MEDLINE 1946 to Present

**Interface:** Ovid

**Date:** June 23, 2017

LINE	SEARCH SYNTAX	RESULTS
<b>1</b>	("Rotator Cuff Injuries" or "Rotator Cuff Tear Arthropathy").sh.	4,316
<b>2</b>	(rotator cuff injur* or 'rotator cuff tear' or 'rotator cuff tears' or ('rotator cuff' adj3 repair) or ('rotator cuff' adj3 rupture*)).ab,ti,kf.	5,362
<b>3</b>	(animals not humans).sh.	4,388,174
<b>4</b>	cadaver.sh. or cadaver*.ti.	40,076
<b>5</b>	(comment or editorial or letter or historical article or addresses or news or newspaper article or case reports).pt. or case report.ti.	3,840,970
<b>6</b>	3 or 4 or 5	8,153,266
<b>7</b>	Rotator Cuff/ab, dg, de, pa, pp, su [Abnormalities, Diagnostic Imaging, Drug Effects, Pathology, Physiopathology, Surgery]	4,642
<b>8</b>	1 or 7 or 2	7,688
<b>9</b>	8 not 6	6,109
<b>10</b>	limit 9 to (english language and yr="1990 -Current")	5,283

Date: June 6, 2018

LINE	SEARCH SYNTAX	RESULTS
11	Limit 10 to ed=20170623-20180606	459

**Notes:**

sh = MeSH subject heading

ab = abstract

ti = title

kf = keywords

pt = publication type

ed = entry date

## Embase via Elsevier

**Database:** Embase

**Interface:** Embase.com (Elsevier)

**Date:** June 23, 2017

LINE	SEARCH SYNTAX	RESULTS
1	'rotator cuff injury'/exp OR 'rotator cuff'/exp	13,111
2	((('rotator cuff')NEAR/3(injur* OR tear OR tears OR repair OR rupture)):ti,ab	6,340
3	'cadaver'/de OR 'in vitro study'/exp OR 'animal experiment'/de OR 'animal model'/de OR 'nonhuman'/de OR 'abstract report'/de OR 'book'/de OR 'editorial'/de OR 'note'/de OR 'letter'/de OR 'case study'/de OR 'case report'/de OR 'conference abstract'/it OR 'chapter'/it OR 'medical record review'/de OR 'conference paper'/it OR 'conference review'/it OR 'editorial'/it OR 'letter'/it OR 'note'/it	14,445,708
4	#1 OR #2 NOT #3	8,597
5	#1 OR #2 NOT #3 AND [english]/lim AND [1990-2018]/py	7,147

Date: June 6, 2018

LINE	SEARCH SYNTAX	RESULTS
6	#5 AND [23-6-2017]/sd NOT [7-6-2018]/sd	890

**Notes:**

exp = Emtree term, exploded

de = Emtree term

it = publication type

ti = title

ab = abstract

sd = date added to Embase

## Cochrane Library via Wiley

**Databases:** Cochrane Database of Systematic Reviews (CDSR) and Cochrane Central Register of Controlled Trials (CENTRAL)

**Interface:** Wiley

**Date:** June 21, 2017

LINE	SEARCH SYNTAX	RESULTS
1	MeSH descriptor: [Rotator Cuff] explode all trees	368
2	MeSH descriptor: [Rotator Cuff Injuries] explode all trees	89
3	"rotator cuff":ti,ab	680
4	(injur* or tear or tears or repair or rupture):ti,ab	35,298
5	#3 and #4	444
6	"conference abstract":pt	79,153
7	#1 or #2 or #5 not #6 Publication Year from 1990 to 2017	558
	<b>Cochrane Reviews</b>	<b>12</b>
	<b>CENTRAL</b>	<b>464</b>

Date: June 6, 2018

LINE	SEARCH SYNTAX	RESULTS
8	#7 Publication Year from 2017 to 2018	
	<b>Cochrane Reviews</b>	<b>1</b>
	<b>CENTRAL</b>	<b>116</b>

### Notes:

ti = title

ab = abstract

pt = publication type

## **PARTICIPATING PEER REVIEW ORGANIZATIONS**

Peer review of the systematic literature review is completed by interested external organizations. The AAOS solicits reviewers for each systematic literature review . They consist of experts in the topic area and represent professional societies other than AAOS. Review organizations are nominated by the systematic literature review development group at the introductory meeting.

Peer review and public comment responses are available on [www.aaos.org/guidelines](http://www.aaos.org/guidelines).

**Participation in the AAOS systematic literature review peer review process does not constitute an endorsement nor does it imply that the reviewer supports this document.**

## STRUCTURED PEER REVIEW FORM

Peer reviewers are asked to read and review the draft of the systematic literature review with a particular focus on their area of expertise. Their responses to the answers below are used to assess the validity, clarity, and accuracy of the interpretation of the evidence.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. The overall objective(s) of the guideline is (are) specifically described.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. The health question(s) covered by the guideline is (are) specifically described.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. The guideline's target audience is clearly described.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. The guideline development group includes individuals from all the relevant professional groups.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. There is an explicit link between the recommendations and the supporting evidence.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Given the nature of the topic and the data, all clinically important outcomes are considered.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. The patients to whom this guideline is meant to apply are specifically described.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. The criteria used to select articles for inclusion are appropriate.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. The reasons why some studies were excluded are clearly described.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. All important studies that met the article inclusion criteria are included.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. The validity of the studies is appropriately appraised.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. The methods are described in such a way as to be reproducible.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. The statistical methods are appropriate to the material and the objectives of this guideline.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Important parameters (e.g., setting, study population, study design) that could affect study results are systematically addressed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Health benefits, side effects, and risks are adequately addressed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. The writing style is appropriate for health care professionals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. The grades assigned to each recommendation are appropriate.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please provide a brief explanation of both your positive and negative answers in the preceding section. If applicable, please specify the draft page and line numbers in your comments. Please feel free to also comment on the overall structure and content of the Guideline.

Would you recommend these guidelines for use in clinical practice?\*

- ☐ Strongly Recommend
- ☐ Recommend
- ☐ Would Not Recommend
- ☐ Unsure

Additional Comments:

To view an example of the structured peer review form, please select the following link:  
[Structured Peer Review Form](#)



## EXCLUDED STUDIES

Author	Article Title	Reason for Exclusion
Abate, M. 2017	Risk factors associated to bilateral rotator cuff tears	Does not address prognostic question of interest
Abate, M. 2017	Risk factors associated to bilateral rotator cuff tears	Incorrect patient population for prognostic
Abbot, Ae 2009	Arthroscopic treatment of concomitant superior labral anterior posterior (SLAP) lesions and rotator cuff tears in patients over the age of 45 years	Duplicate study (same as AAOSID 3182)
Abd-ElGawad, E. A. 2013	Evaluation of supraspinatus muscle tears by ultrasonography and magnetic resonance imaging in comparison with surgical findings	*Not best available (low quality)
Abdelhamid, S. A. 2013	Portal track infiltration versus Interscalene brachial plexus block for Pain control following shoulder arthroscopy	Not best available evidence
Abdulla, S. Y. 2015	Is exercise effective for the management of subacromial impingement syndrome and other soft tissue injuries of the shoulder? A systematic review by the Ontario Protocol for Traffic Injury Management (OPTIMa) Collaboration	Systematic review
Abdul-Wahab, T. A. 2016	Initial treatment of complete rotator cuff tear and transition to surgical treatment: systematic review of the evidence	Systematic Review
Abraham, V. T. 2016	Systematic Review of Biceps Tenodesis: Arthroscopic Versus Open	Systematic Review
Abrams, Gd 2014	Arthroscopic Repair of Full-Thickness Rotator Cuff Tears With and Without Acromioplasty: randomized Prospective Trial With 2-Year Follow-up	same as A1647
Abrams, J. S. 2008	Arthroscopic techniques for massive rotator cuff repairs	Case series
Abrams, J. S. 2007	Arthroscopic Biceps Tenodesis: Direct Suturing and Results	Case series
Abtahi, A. M. 2015	Factors affecting healing after arthroscopic rotator cuff repair	Narrative review
Adams, C. R. 2012	A systematic approach for diagnosing subscapularis tendon tears with preoperative magnetic resonance imaging scans	*Not best available (low quality)
Adams, C. R. 2010	Accuracy of preoperative magnetic resonance imaging in predicting a subscapularis tendon tear based on arthroscopy	*Not best available (low quality)

Author	Article Title	Reason for Exclusion
Adebajo, A. O. 1990	A prospective double blind dummy placebo controlled study comparing triamcinolone hexacetonide injection with oral diclofenac 50 mg TDS in patients with rotator cuff tendinitis	Not best available evidence
Adolfsson, L. 1993	Results of arthroscopic acromioplasty related to rotator cuff lesions	not a relevant study or review
Agnello, L. 2003	Rehabilitation following injury of the rotator cuff	Not best available evidence
Ahearn, N. 2013	The influence of rotator cuff pathology on functional outcome in total shoulder replacement	only 15 pts with PT RCT
Ahmad, S. 2015	The influence of intraoperative factors and postoperative rehabilitation compliance on the integrity of the rotator cuff after arthroscopic repair	N/A
Ahmad, Z. 2012	Exploring the application of stem cells in tendon repair and regeneration	Systematic review
Ahmed, A. S. 2016	Does Diabetes Mellitus Affect Tendon Healing?	Background article
Ainsworth, R. 2007	Exercise therapy for the conservative management of full thickness tears of the rotator cuff: a systematic review	Systematic review
Akbar, M. 2012	Etiology of rotator cuff tears in paraplegic patients: a case-control study.[Retraction in J Shoulder Elbow Surg. 2012 Jul;21(7):983; PMID: 22608702]	not a relevant study or review
Akgun, K. 2004	Is local subacromial corticosteroid injection beneficial in subacromial impingement syndrome?	Not best available evidence
Akkaya, S. 2012	Two years results of supervised physiotherapy and home exercise programmes in patients with arthroscopic assisted mini-open rotator cuff repair	Study not in English
Akram, M. 2016	Acromion types and role of corticosteroid with shoulder impingement syndrome	steroid given to all pts, no comparison group
Akram, M. 2016	Acromion Types and Role of Corticosteroid with Shoulder Impingement Syndrome	No comparison group
Akram, M. 2016	Acromion Types and Role of Corticosteroid with Shoulder Impingement Syndrome	Not applicable to PICO 8; no primary RC surgery
Aktas, E. 2015	MRI analysis of coracohumeral interval width and its relation to rotator cuff tear	not a relevant study or review
Alasaarela, E. 1998	Ultrasound and operative evaluation of arthritic shoulder joints	Less than 10 patients in RC comparison group
Alasaarela, E. 1997	Sonography and MRI in the evaluation of painful arthritic shoulder	*Not best available (moderate quality)
Albert, Jd 2007	High-energy extracorporeal shock-wave therapy for calcifying tendinitis of the rotator cuff: a randomised trial	no rotator cuff tears; all pts with calcifying tendinitis

Author	Article Title	Reason for Exclusion
Aleem, A. W. 2012	Outcomes of rotator cuff surgery: what does the evidence tell us?	Narrative review
Alemanno, F. 2012	Tramadol and 0.5% levobupivacaine for single-shot interscalene block: effects on postoperative analgesia in patients undergoing shoulder arthroplasty	Not best available evidence
Alemanno, F. 2016	The use of vitamin B1 as a perineural adjuvant to middle interscalene block for postoperative analgesia after shoulder surgery	Not best available evidence
Alemanno, F. 2016	The use of vitamin B1 as a perineural adjuvant to middle interscalene block for postoperative analgesia after shoulder surgery	Not best available evidence
Alemanno, F. 2014	Buprenorphine versus tramadol as perineural adjuvants for postoperative analgesia in patients undergoing arthroscopic rotator cuff repair under middle interscalene block: a retrospective study	Not best available evidence
Aliprandi, A. 2006	One-shot CT and MR arthrography of the shoulder with a mixture of iodinated and paramagnetic contrast agents using arthroscopy as a gold standard	correlating measurements, not measuring diagnostic ability
Aliprandi, A. 2017	Reporting rotator cuff tears on magnetic resonance arthrography using the Snyder's arthroscopic classification	*High quality-Incorrect patient population (<10 negative reference standard patients)
Allmann, K. H. 1999	Indirect MR arthrography of the unexercised glenohumeral joint in patients with rotator cuff tears	Does not address diagnostic question of interest
Allmann, K. H. 1997	Cine-MR imaging of the shoulder	no diagnosis of tear, group has healthy pts
Almeida, A. 2011	Comparative Analysis on the Result for Arthroscopic Rotator Cuff Suture between Smoking and Non-Smoking Patients	Not applicable to PICO 8; no multivariate analysis
Alqunae, M. 2012	Diagnostic accuracy of clinical tests for subacromial impingement syndrome: A systematic review and meta-analysis	Systematic review
Al-Shawi, A. 2008	The detection of full thickness rotator cuff tears using ultrasound	*Not best available (moderate quality)
Al-Shenqiti, A. M. 2005	Test-retest reliability of myofascial trigger point detection in patients with rotator cuff tendonitis	not a relevant study or review
Altchek, D. W. 1992	Arthroscopic labral debridement. A three-year follow-up study	Retrospective case series
Altchek, D. W. 1990	Arthroscopic acromioplasty. Technique and results	only 10 pts had FTRCTs
Alvarez, Cm 2005	A prospective, double-blind, randomized clinical trial comparing subacromial injection of betamethasone	Duplicate study (same as AAOSID 2127)

Author	Article Title	Reason for Exclusion
	and xylocaine to xylocaine alone in chronic rotator cuff tendinosis	
Amadi, H. O. 2014	Specificity of clinical examinations for testing glenohumeral ligament integrity: a computational study	no diagnostic testing for tears
Amin, M. F. 2012	The diagnostic value of magnetic resonance arthrography of the shoulder in detection and grading of SLAP lesions: Comparison with arthroscopic findings	Incorrect patient population (<10 TP/TN)
Amoo-Achampong, K. 2016	An orthopedist's guide to shoulder ultrasound: a systematic review of examination protocols	systematic review
Anakwenze, O. 2017	Complications in total shoulder and reverse total shoulder arthroplasty by body mass index	includes RC arthropathy pts, OA pts, and RCTs, not stratified
Anderson, M. W. 2012	Imaging evaluation of the rotator cuff	Background article
Andia, I. 2016	Clinical Outcomes of Biologic Treatment for Chronic Tendinopathy	Narrative review
Andia, I. 2015	Muscle and tendon injuries: The role of biological interventions to promote and assist healing and recovery	Systematic review
Anley, C. M. 2014	Arthroscopic treatment options for irreparable rotator cuff tears of the shoulder	Narrative review
Anonymous, 2014	BET 2: Is ultrasound a reliable way of detecting rotator cuff injuries of the shoulder?	Review
Anz, A. W. 2014	MRI T2 mapping of the asymptomatic supraspinatus tendon by age and imaging plane using clinically relevant subregions	used asymptomatic pts
Arend, C. F. 2010	Comparison between exclusively long-axis and multiple-axis sonographic protocols for screening of rotator cuff lesions in symptomatic shoulders	*Not best available (moderate quality)
Arirachakaran, A. 2017	Extracorporeal shock wave therapy, ultrasound-guided percutaneous lavage, corticosteroid injection and combined treatment for the treatment of rotator cuff calcific tendinopathy: a network meta-analysis of RCTs	meta-analysis
Arndt, J 2012	Immediate passive motion versus immobilization after endoscopic supraspinatus tendon repair: a prospective randomized study	duplicate, A12589
Arndt, J. 2012	Immediate passive motion versus immobilization after endoscopic supraspinatus tendon repair: A prospective randomized study	duplicate, A12589

Author	Article Title	Reason for Exclusion
Arndt, J. 2012	Immediate passive motion versus immobilization after endoscopic supraspinatus tendon repair: a prospective randomized study	duplicate, A12589
Arnold, H. 2012	Non-contrast magnetic resonance imaging for diagnosing shoulder injuries	*Not best available (low quality)
Arntz, C. T. 1991	Surgical management of complex irreparable rotator cuff deficiency	Very low quality
Arora, M. 2015	Polytetrafluoroethylene patches for massive rotator cuff tears: An update of current concepts	Narrative review
Arora, M. 2015	The shoulder in cricket: What's causing all the painful shoulders?	narrative review
Arora, M. 2015	Over half of badminton players suffer from shoulder pain: Is impingement to blame?	Narrative review
Arroll, B. 2005	Corticosteroid injections for painful shoulder: A meta-analysis	Meta-analysis
Arslan, G. 1999	Sonographically detected subacromial/subdeltoid bursal effusion and biceps tendon sheath fluid: Reliable signs of rotator cuff tear?	*Not best available (moderate quality)
Arslan, G. 1999	Sonographically detected subacromial/subdeltoid bursal effusion and biceps tendon sheath fluid: reliable signs of rotator cuff tear?	*Not best available (moderate quality)
Atef, A. 2016	Prevalence of associated injuries after anterior shoulder dislocation: a prospective study	No sensitivity/specificity, LR, or ROC curve values
Ateschrang, A. 2018	Obesity causes poorer clinical results and higher re-tear rates in rotator cuff repair	Not applicable to PICO 8; no multivariate analysis
Audenaert, E. 2006	Reconstruction of massive rotator cuff lesions with a synthetic interposition graft: a prospective study of 41 patients	Very low quality
Audige, L. 2015	Complications Following Arthroscopic Rotator Cuff Tear Repair: A Systematic Review of Terms and Definitions With Focus on Shoulder Stiffness	Systematic review
Audige, L. 2015	Complications Following Arthroscopic Rotator Cuff Tear Repair: A Systematic Review of Terms and Definitions With Focus on Shoulder Stiffness	Systematic review
Audige, L. 2016	Complications associated with arthroscopic rotator cuff tear repair: definition of a core event set by Delphi consensus process	Systematic review
Austin, L. 2015	Arthroscopic transosseous rotator cuff repair: A prospective study on cost savings, surgical time, and outcomes	Insufficient data

Author	Article Title	Reason for Exclusion
Austin, L. 2015	Sleep disturbance associated with rotator cuff tear: correction with arthroscopic rotator cuff repair	Not applicable to PICO 8: only 6 months follow-up post-op
Avery, Dm 2015	Surgeon-rated visualization in shoulder arthroscopy: a randomized blinded controlled trial comparing irrigation fluid with and without epinephrine	not a relevant study or review
Aydin, N. 2017	High-grade bursal-side partial rotator cuff tears: comparison of mid- and long-term results following arthroscopic repair after conversion to a full-thickness tear	Retrospective case series
Aytar, A. 2015	The effects of scapular mobilization in patients with subacromial impingement syndrome: a randomized, double-blind, placebo-controlled clinical trial	Not best available evidence
Badman, B. 2011	Results of proximal humeral locked plating with supplemental suture fixation of rotator cuff	not a relevant study or review
Bak, K. 2010	The Value of Clinical Tests in Acute Full-Thickness Tears of the Supraspinatus Tendon: Does a Subacromial Lidocaine Injection Help in the Clinical Diagnosis? A Prospective Study	Incorrect patient population
Baker, C. L. 1995	Comparison of open and arthroscopically assisted rotator cuff repairs	*not best available
Baker, D. K. 2017	Arthroscopic Versus Open Rotator Cuff Repair: Which Has a Better Complication and 30-Day Readmission Profile?	Not best available evidence
Balasubramaniam, U. 2015	Efficacy of platelet-rich plasma injections in pain associated with chronic tendinopathy: A systematic review	Systematic review
Balich, S. M. 1997	MR imaging of the rotator cuff tendon: interobserver agreement and analysis of interpretive errors	*Not best available (moderate quality)
Balyk, R. 2008	Do outcomes differ after rotator cuff repair for patients receiving workers' compensation?	Does not meet inclusion criteria (surgical outcomes <1 year)
Banas, M. P. 1995	Relationship between the lateral acromion angle and rotator cuff disease	*Not best available (moderate quality)
Banerjee, M. 2016	Moderate value of non-contrast magnetic resonance imaging after non-dislocating shoulder trauma	*Not best available evidence
Bang, S. R. 2010	Can gabapentin help reduce postoperative pain in arthroscopic rotator cuff repair? A prospective, randomized, double-blind study	Duplicate to AAOSID 2864
Bannuru, R. R. 2014	High-energy extracorporeal shock-wave therapy for treating chronic calcific tendinitis of the shoulder: a systematic review	systematic review

Author	Article Title	Reason for Exclusion
Barber, F. A. 2013	Platelet-rich plasma for rotator cuff repair	narrative review
Barber, F. A. 2016	Triple-Loaded Single-Row Versus Suture-Bridge Double-Row Rotator Cuff Tendon Repair With Platelet-Rich Plasma Fibrin Membrane: A Randomized Controlled Trial	Duplicate article; same as AAOS ID 465
Barber, F. A. 2002	The effectiveness of an anesthetic continuous-infusion device on postoperative pain control	Incorrect patient population (included patients <18 years)
Barber, F. A. 2011	Rotator cuff repair healing influenced by platelet-rich plasma construct augmentation	Duplicate study (same as AAOSID 12464)
Barber, Fa 2016	Triple-Loaded Single-Row Versus Suture-Bridge Double-Row Rotator Cuff Tendon Repair with Platelet-Rich Plasma Fibrin Membrane: A Randomized Controlled Trial	Duplicate study (same as AAOSID 465 which is already included)
Barber, Fa 2012	A prospective, randomized evaluation of acellular human dermal matrix augmentation for arthroscopic rotator cuff repair	Duplicate study (same as AAOSID 8432)
Barber, Fa 2011	Rotator cuff repair healing influenced by platelet-rich plasma construct augmentation	*not best available
Barfield, L. C. 2007	Arthroscopic versus open acromioplasty: a systematic review	Systematic review
BariÅ? Bayram, K. 2014	Does suprascapular nerve block improve shoulder disability in impingement syndrome? A randomized placebo-controlled study	Not best available evidence
Barile, A. 2013	Lesions of the biceps pulley as cause of anterosuperior impingement of the shoulder in the athlete: potentials and limits of MR arthrography compared with arthroscopy	*Not best available (low quality)
Barlow, J. D. 2016	What factors are predictors of emotional health in patients with full-thickness rotator cuff tears?	Does not address prognostic question of interest
Barlow, J. D. 2016	What factors are predictors of emotional health in patients with full-thickness rotator cuff tears?	Not relevant to PICO's
Barnes, L. A. 2017	Satisfaction, function and repair integrity after arthroscopic versus mini-open rotator cuff repair	mini-open group only 9 FT tears
Barth, J. 2017	Critical period and risk factors for retear following arthroscopic repair of the rotator cuff	Not applicable to PICO 8; no multivariate analysis
Barth, J. 2017	Can a drill guide improve the coracoid graft placement during the Latarjet procedure?: A prospective comparative study with the freehand technique	Not best available evidence

Author	Article Title	Reason for Exclusion
Bartolozzi, A. 1994	Determinants of outcome in the treatment of rotator cuff disease	Incorrect patient population (Not exclusive to full-thickness tears for prognostic patients)
Basar, S. 2014	Does presence of anterior greater tuberosity cysts change the function in patients with chronic rotator cuff tear?	not a relevant study or review
Basat, H. C. 2016	Post operative pain management in shoulder surgery: Suprascapular and axillary nerve block by arthroscope assisted catheter placement	Very low quality
Bauer, S. 2014	Reliability of a 3 T MRI protocol for objective grading of supraspinatus tendonosis and partial thickness tears	does not fit any PICO criteria
Baumer, T. G. 2016	Effects of Rotator Cuff Pathology and Physical Therapy on In Vivo Shoulder Motion and Clinical Outcomes in Patients With a Symptomatic Full-Thickness Rotator Cuff Tear	healthy controls
Baumgarten, K. M. 2016	Are Pulley Exercises Initiated 6 Weeks After Rotator Cuff Repair a Safe and Effective Rehabilitative Treatment? A Randomized Controlled Trial	use of pulleys vs no use of pulleys, not PICO 5
Baumgarten, K. M. 2016	Are Pulley Exercises Initiated 6 Weeks After Rotator Cuff Repair a Safe and Effective Rehabilitative Treatment? A Randomized Controlled Trial	Imperfect comparison group
Baumgarten, K. M. 2009	Rotator Cuff Repair Rehabilitation: A Level I and II Systematic Review	Systematic Review
Baykal, T. 2013	The comparison of the effects of the combination of physical therapy modalities and local corticosteroid therapy and alone physical therapy in the patients with hemiplegic shoulder pain	Not best available evidence
Bayle, X. 2017	No difference in outcome for open versus arthroscopic rotator cuff repair: a prospective comparative trial	Incorrect patient population (non-full-thickness tears)
Bazzocchi, A. 2016	Ultrasound imaging-guided percutaneous treatment of rotator cuff calcific tendinitis: success in short-term outcome	Systematic Review
Beaudreuil, J. 2017	Physiotherapy for degenerative rotator cuff disease of the shoulder	REVIEW - WRITTEN IN FRENCH
Beaudreuil, J. 2010	Clinical practice guidelines for the surgical management of rotator cuff tears in adults	systematic review
Beaudreuil, J. 2010	Clinical practice guidelines for the surgical management of rotator cuff tears in adults	Systematic Review



Author	Article Title	Reason for Exclusion
Beaudreuil, J. 2009	Contribution of clinical tests to the diagnosis of rotator cuff disease: a systematic literature review	systematic review
Becker, W. 1998	Arthroscintigraphy in suspected rotator cuff rupture	Incorrect patient population (<10 patients/total groups)
Beitzel, K. 2013	The future role of mesenchymal stem cells in the management of shoulder disorders	Systematic review
Bencardino, J. T. 2000	Superior labrum anterior-posterior lesions: diagnosis with MR arthrography of the shoulder	*Not best available (moderate quality)
Bencardino, J. T. 2010	Pain related to rotator cuff abnormalities: MRI findings without clinical significance	Background article
Bennett, W. F. 2003	Arthroscopic repair of anterosuperior (supraspinatus/subscapularis) rotator cuff tears: a prospective cohort with 2- to 4-year follow-up. Classification of biceps subluxation/instability	*not best available
Bennett, W. F. 1998	Specificity of the Speed's test: arthroscopic technique for evaluating the biceps tendon at the level of the bicipital groove	*Not best available (moderate quality)
Berg, E. E. 1995	Heterotopic ossification after acromioplasty and distal clavicle resection	17 pts total in 2 groups
Bergeson, A. G. 2012	Effects of platelet-rich fibrin matrix on repair integrity of at-risk rotator cuff tears	differences in baseline follow up between two groups
Bernstein, R. M. 2001	Injections and surgical therapy in chronic pain	Narrative review
Berth, A. 2010	Massive rotator cuff tears: functional outcome after debridement or arthroscopic partial repair	does not fit minimum 12 months follow up duration for surgical outcome
Berth, A. 2008	Hemi- versus bipolar shoulder arthroplasty for chronic rotator cuff arthropathy	Not applicable to PICO 10; imperfect comparison
Bhatia, S. 2013	Arthroscopic management of recalcitrant stiffness following rotator cuff repair: A retrospective analysis	not a relevant study or review
Bhatnagar, A. 2016	Correlation between MRI and Arthroscopy in Diagnosis of Shoulder Pathology	*Not best available (moderate quality)
Bialoszewski, D. 2011	Usefulness of manual therapy in the rehabilitation of patients with chronic rotator cuff injuries. Preliminary report	Does not address question of interest
Biberthaler, P. 2013	Significant benefit for older patients after arthroscopic subacromial decompression: a long-term follow-up study	Incorrect patient population
Bidwai, A. S. 2016	Medium- to long-term results of a randomized controlled trial to assess the efficacy of arthroscopic-subacromial decompression versus mini-open repair for the treatment of medium-sized rotator cuff tears	*not best available

Author	Article Title	Reason for Exclusion
Bigoni, M 2009	Shoulder evaluation with isokinetic strength testing after arthroscopic rotator cuff repairs	*not best available
Bigoni, M. 2009	Shoulder evaluation with isokinetic strength testing after arthroscopic rotator cuff repairs	techniques not listed in PICO 9
Birtane, M. 2001	The diagnostic value of magnetic resonance imaging in subacromial impingement syndrome	*Not best available (moderate quality)
Bishop, J. 2006	Cuff integrity after arthroscopic versus open rotator cuff repair: a prospective study	*not best available
Bishop, J. Y. 2015	Smoking Predisposes to Rotator Cuff Pathology and Shoulder Dysfunction: A Systematic Review	Systematic review
Biz, C. 2012	Prospective study of three surgical procedures for long head biceps tendinopathy associated with rotator cuff tears	Not relevant to PICOs; no RC repair only group
Björklund, H. C. 2011	The influence of age, delay of repair, and tendon involvement in acute rotator cuff tears: Structural and clinical outcomes after repair of 42 shoulders	same risks factors assessed in a high quality study
Blaine, T. 2008	Treatment of persistent shoulder pain with sodium hyaluronate: a randomized, controlled trial. A multicenter study	Not best available evidence
Blair, B. 1996	Efficacy of injections of corticosteroids for subacromial impingement syndrome	pts not required to have surgery
Blanchard, T. K. 1999	Diagnostic and therapeutic impact of MRI and arthrography in the investigation of full-thickness rotator cuff tears	*Not best available (moderate quality)
Blanchard, T. K. 1999	Magnetic resonance imaging or arthrography for shoulder problems: A randomised study	Does not address diagnostic question of interest
Blanchard, Tk 1999	Diagnostic and therapeutic impact of MRI and arthrography in the investigation of full-thickness rotator cuff tears	*Not best available (moderate quality)
Blankstein, A. 2005	Ultrasonography as a diagnostic modality in acromioclavicular joint pathologies	No sensitivity/specificity, LR, or ROC curve values
Bleichert, S. 2017	Rehabilitation of symptomatic atraumatic degenerative rotator cuff tears: A clinical commentary on assessment and management	Natural history
Blonna, D. 2015	Subclinical hypothyroidism and diabetes as risk factors for postoperative stiff shoulder	Not applicable to PICO 8
Blonna, D. 2017	Subclinical hypothyroidism and diabetes as risk factors for postoperative stiff shoulder	Duplicate article; same as 105
Bloom, Jason E 2012	Image-guided versus blind glucocorticoid injection for shoulder pain	Systematic review

Author	Article Title	Reason for Exclusion
Blum, A. 1993	Direct coronal view of the shoulder with arthrographic CT	*Not best available (moderate quality)
Bodin, J. 2014	Natural course of rotator cuff syndrome in a French working population	Natural history
Boeck, RI 2012	Open kinetic chain versus closed kinetic chain in advanced rehabilitation rotator cuff	Not relevant to PICO's;
Boehm, T. D. 2003	Os acromiale associated with tear of the rotator cuff treated operatively	no concomitant treatments
Boehm, T. D. 2005	Heterotopic ossification after primary shoulder arthroplasty	Incidence study
Boehm, T. D. 2005	The effect of suture materials and techniques on the outcome of repair of the rotator cuff: a prospective, randomised study	SAME AS AAOS ID 12490, 10541
Boehm, T. D. 2005	The effect of suture materials and techniques on the outcome of repair of the rotator cuff	SAME AS AAOS ID 12490, 3968
Boehm, Td 2005	The effect of suture materials and techniques on the outcome of repair of the rotator cuff: a prospective, randomised study	Imperfect comparator (differentiating between suture types)
Boileau, P. 2007	Isolated arthroscopic biceps tenotomy or tenodesis improves symptoms in patients with massive irreparable rotator cuff tears	Duplicate study (same as AAOSID 3617)
Boileau, P. 2007	Isolated arthroscopic biceps tenotomy or tenodesis improves symptoms in patients with massive irreparable rotator cuff tears	Not applicable to PICO 10; pts w/ arthropathy
Boissonnault, W. G. 2007	Patient outcome following rehabilitation for rotator cuff repair surgery: the impact of selected medical comorbidities	Incorrect patient population (No indication of exclusivity to full-thickness tears for prognostic patients)
Bokor, D. J. 2016	Evidence of healing of partial-thickness rotator cuff tears following arthroscopic augmentation with a collagen implant: a 2-year MRI follow-up	no comparison group
Bokor, D. J. 2015	Preliminary investigation of a biological augmentation of rotator cuff repairs using a collagen implant: a 2-year MRI follow-up	9 pts total
Bollier, M. 2012	Systematic review: what surgical technique provides the best outcome for symptomatic partial articular-sided rotator cuff tears?	Systematic Review
Bolukbasi, S. 2002	Modified and classic acromioplasty for impingement of the shoulder	No isolated RC repair group

Author	Article Title	Reason for Exclusion
Bond, E. C. 2017	The role of acromioplasty when repairing rotator cuff tears-no difference in pain or functional outcome at 24 months in a cohort of 2,441 patients	Very low quality
Bonnevialle, N. 2015	Variations of the micro-vascularization of the greater tuberosity in patients with rotator cuff tears	not a relevant study or review
Bonsell, S. 2000	The relationship of age, gender, and degenerative changes observed on radiographs of the shoulder in asymptomatic individuals	asymptomatic pts
Boocock, M. G. 2009	A Framework for the Classification and Diagnosis of Work-Related Upper Extremity Conditions: Systematic Review	Systematic Review
Boorman, R. S. 2018	What happens to patients when we do not repair their cuff tears? Five-year rotator cuff quality-of-life index outcomes following nonoperative treatment of patients with full-thickness rotator cuff tears	Natural History (but includes non-op treatment)
Borgeat, A. 1997	Patient-controlled analgesia after major shoulder surgery: Patient- controlled interscalene analgesia versus patient-controlled analgesia	Not best available evidence
Boss, A. P. 2004	Continuous subacromial bupivacaine infusion for postoperative analgesia after open acromioplasty and rotator cuff repair: preliminary results	Duplicate study (same as AAOSID 12507)
Boss, Ap 2004	Continuous subacromial bupivacaine infusion for postoperative analgesia after open acromioplasty and rotator cuff repair: preliminary results	Not best available evidence
Bouchard, A. 2014	Failed subacromial decompression. Risk factors	only 6 pts have FT tears
Boudreault, J. 2014	The efficacy of oral non-steroidal anti-inflammatory drugs for rotator cuff tendinopathy: a systematic review and meta-analysis	Systematic Review - WRONG PDF
Boult, M. 2001	Arthroscopic subacromial decompression with a holmium:YAG laser: review of the literature	Systematic Review
Boutsiadis, A. 2018	The lateralization and distalization shoulder angles are important determinants of clinical outcomes in reverse shoulder arthroplasty	Not applicable to PICO 10; imperfect comparison
Brander, V. A. 2010	Efficacy and Safety of Hylan G-F 20 for Symptomatic Glenohumeral Osteoarthritis: A Prospective, Pilot Study	Imperfect comparison group
Brantingham, J. W. 2011	Manipulative therapy for shoulder pain and disorders: expansion of a systematic review	Systematic Review
Braun, C. 2016	Prognostic Models in Adults Undergoing Physical Therapy for Rotator Cuff Disorders: Systematic Review	Systematic review

Author	Article Title	Reason for Exclusion
Braun, C. 2016	Prognostic Models in Adults Undergoing Physical Therapy for Rotator Cuff Disorders: Systematic Review	Systematic review
Brennan, G. P. 2010	Description of clinical outcomes and postoperative utilization of physical therapy services within 4 categories of shoulder surgery	not relevant to PICO 5; compares PT after 4 diff surgeries, not diff PT methods
Brenneke, S. L. 1992	Evaluation of ultrasonography as a diagnostic technique in the assessment of rotator cuff tendon tears	*Not best available (moderate quality)
Brockmeyer, M. 2017	Limited diagnostic accuracy of magnetic resonance imaging and clinical tests for detecting partial-thickness tears of the rotator cuff	Not best available evidence
Bron, C. 2007	Treatment of myofascial trigger points in common shoulder disorders by physical therapy: a randomized controlled trial [ISRCTN75722066]	study proposal; no data
Brown, M. J. 2015	Does Suture Technique Affect Re-Rupture in Arthroscopic Rotator Cuff Repair? A Meta-analysis	Meta-analysis
Brox, J. I. 1995	Pain influence on isokinetic shoulder muscle strength in patients with rotator tendinosis (impingement syndrome stage II)	Incorrect patient population (<10 patients/comparative group)
Brox, Ji 1993	Arthroscopic surgery compared with supervised exercises in patients with rotator cuff disease (stage II impingement syndrome)	comparing surgery to PT and placebo laser; not all patients operated on
Bryant, L. 2002	A comparison of clinical estimation, ultrasonography, magnetic resonance imaging, and arthroscopy in determining the size of rotator cuff tears	all pts w/tears, study examines tear size
Bryant, L. 2002	A comparison of clinical estimation, ultrasonography, magnetic resonance imaging, and arthroscopy in determining the size of rotator cuff tears	*Not best available (moderate quality)
Buchbinder, R. 2003	Corticosteroid injections for shoulder pain	Systematic review
Buess, E. 2005	Open versus arthroscopic rotator cuff repair: a comparative view of 96 cases	*not best available
Buess, E. 2009	A comparative clinical evaluation of arthroscopic single-row versus double-row supraspinatus tendon repair	*not best available
Buford, D., Jr. 2000	Midterm results of arthroscopic co-planing of the acromioclavicular joint	no comparison group
Buker, N. 2011	Functional results of local corticosteroid injections in the management of shoulder pain	Imperfect comparison group

Author	Article Title	Reason for Exclusion
Burbank, K. M. 2008	Chronic shoulder pain: part I. Evaluation and diagnosis	Background article
Burkhart, S. S. 2001	Arthroscopic rotator cuff repair: Analysis of results by tear size and by repair technique-margin convergence versus direct tendon-to-bone repair	Not best available evidence
Burkhart, S. S. 2001	Arthroscopic rotator cuff repair: Analysis of results by tear size and by repair technique-margin convergence versus direct tendon-to-bone repair	Very low quality
Burkhead Jr, W. Z. 1992	Treatment of instability of the shoulder with an exercise program	shoulder dislocation, no RCTs
Burkhead Jr, W. Z. 2007	Use of Graft Jacket as an Augmentation for Massive Rotator Cuff Tears	Incorrect patient population (<10 patients/comparative group)
Burks, Rt 2009	A prospective randomized clinical trial comparing arthroscopic single- and double-row rotator cuff repair: magnetic resonance imaging and early clinical evaluation	Duplicate study (same as AAOSID 3228)
Bury, J. 2016	Effectiveness of scapula-focused approaches in patients with rotator cuff related shoulder pain: A systematic review and meta-analysis	systematic review
Busconi, B. B. 2008	The proximal biceps tendon: tricks and pearls	not a relevant study or review
Busfield, B. T. 2014	Subacromial pain pump use is safe after arthroscopic rotator cuff repair	no comparison group
Byeon, G. J. 2015	Infusion Methods for Continuous Interscalene Brachial Plexus Block for Postoperative Pain Control after Arthroscopic Rotator Cuff Repair	Not best available evidence
C. Glanzmann M 2017	Radiological and functional 24-month outcomes of resurfacing versus stemmed anatomic total shoulder arthroplasty	Not applicable to PICO 8; no multivariate analysis
Cacchio, A. 2006	Effectiveness of radial shock-wave therapy for calcific tendinitis of the shoulder: single-blind, randomized clinical study	Not best available evidence
Cadogan, A. 2016	Diagnostic Accuracy of Clinical Examination and Imaging Findings for Identifying Subacromial Pain	Not best available evidence
Cadogan, A. 2013	Diagnostic accuracy of clinical examination features for identifying large rotator cuff tears in primary health care	*Not best available (moderate quality)
Cai, Y. Z. 2015	Efficacy of platelet-rich plasma in arthroscopic repair of full-thickness rotator cuff tears: a meta-analysis	Meta-analysis
Calis, M. 2000	Diagnostic values of clinical diagnostic tests in subacromial impingement syndrome	*Not best available (low quality)

Author	Article Title	Reason for Exclusion
Camarinos, J. 2009	Effectiveness of manual physical therapy for painful shoulder conditions: A systematic review	Systematic review
Carbonel, I. 2013	Outcome and structural integrity of rotator cuff after arthroscopic treatment of large and massive tears with double row technique: a 2-year followup	same technique used on all pts, no comparison
Cardoso de Souza, M. 2009	Progressive resistance training in patients with shoulder impingement syndrome: literature review	Systematic review
Carli, A 2012	Reparable rotator cuff tears with concomitant long-head biceps lesions: tenotomy or tenotomy/tenodesis?	Not applicable to PICO 2: Imperfect comparator
Carr, A 2017	Effectiveness of open and arthroscopic rotator cuff repair (UKUFF): a randomised controlled trial	Not best available evidence
Carr, A 2013	PARot - assessing platelet-rich plasma plus arthroscopic subacromial decompression in the treatment of rotator cuff tendinopathy: Study protocol for a randomized controlled trial	excludes any pts with full thickness RC tears
Carr, A. 2013	PARot--assessing platelet-rich plasma plus arthroscopic subacromial decompression in the treatment of rotator cuff tendinopathy: study protocol for a randomized controlled trial	Same as AAOS ID 12828
Carr, A. J. 2015	Platelet-Rich Plasma Injection With Arthroscopic Acromioplasty for Chronic Rotator Cuff Tendinopathy: A Randomized Controlled Trial	study excludes full-thickness RC tear
Carr, Aj 2015	Platelet-Rich Plasma Injection With Arthroscopic Acromioplasty for Chronic Rotator Cuff Tendinopathy: A Randomized Controlled Trial	study excluded full-thickness RC tears
Carrino, J. A. 1997	Rotator cuff: evaluation with fast spin-echo versus conventional spin-echo MR imaging	*Not best available evidence
Carroll, M. B. 2015	Rilonacept in the treatment of subacromial bursitis: A randomized, non-inferiority, unblinded study versus triamcinolone acetonide	Not best available evidence
Castagna, A. 2015	Deep partial rotator cuff tear: transtendon repair or tear completion and repair? A randomized clinical trial	pts have partial tears, not FT
Castagna, A. 2015	Calcifying tendinitis of the shoulder: arthroscopic needling versus complete calcium removal and rotator cuff repair. A prospective comparative study	No pts with full thickness RC tears;
Castricini, R. 2016	Functional status and failed rotator cuff repair predict outcomes after arthroscopic-assisted latissimus dorsi transfer for irreparable massive rotator cuff tears	Not applicable to PICO 8; no relevant risk factors

Author	Article Title	Reason for Exclusion
Castricini, R. 2014	Arthroscopic-Assisted Latissimus Dorsi Transfer for the Management of Irreparable Rotator Cuff Tears: Short-Term Results	Retrospective case series
Castricini, R. 2011	Platelet-rich plasma augmentation for arthroscopic rotator cuff repair: a randomized controlled trial	Prognostic factor not listed in PICO (growth factor)
Celliers, A. 2017	Clinically relevant magnetic resonance imaging (MRI) findings in elite swimmers' shoulders	no reference standard
Centeno, C. J. 2015	A prospective multi-Site registry study of a specific protocol of autologous bone marrow concentrate for the treatment of shoulder rotator cuff tears and osteoarthritis	no comparison group
Cerciello, S. 2017	The influence of critical shoulder angle on secondary rotator cuff insufficiency following shoulder arthroplasty	Incorrect patient population (<10 patients/total group)
Cetinkaya, M. 2017	Subscapularis Tendon Slip Number and Coracoid Overlap Are More Related Parameters for Subcoracoid Impingement in Subscapularis Tears: A Magnetic Resonance Imaging Comparison Study	sensitivity, specificity, ROC curves do not address diagnostic tests
Chávez-López, M. A. 2009	Methylprednisolone versus triamcinolone in painful shoulder using ultrasound-guided injection	Not best available evidence
Chahal, J. 2012	The role of subacromial decompression in patients undergoing arthroscopic repair of full-thickness tears of the rotator cuff: a systematic review and meta-analysis	Systematic Review
Chahal, J. 2012	The role of platelet-rich plasma in arthroscopic rotator cuff repair: a systematic review with quantitative synthesis	Systematic review
Chan, C. M. 2018	Does Conservative Rehabilitation Program Lead to Long-Term Stiffness after Arthroscopic Rotator Cuff Repair?	Not best available evidence
Chan, K. 2014	Delayed versus early motion after arthroscopic rotator cuff repair: a meta-analysis	Meta-analysis
Chandnani, V. P. 1993	Glenoid labral tears: prospective evaluation with MRI imaging, MR arthrography, and CT arthrography	*Not best available (low quality)
Chandrasekaran, S. 2015	Outcomes of Open Versus Endoscopic Repair of Abductor Muscle Tears of the Hip: A Systematic Review	Systematic review
Chang, C. Y. 2002	Comparison of shoulder ultrasound and MR imaging in diagnosing full-thickness rotator cuff tears	*Not best available (moderate quality)
Chang, E. Y. 2006	Shoulder impingement: objective 3D shape analysis of acromial morphologic features	Does not address question of interest



Author	Article Title	Reason for Exclusion
Chang, K. V. 2015	Corrigendum. Early versus delayed passive range of motion exercise for arthroscopic rotator cuff repair: a meta-analysis of randomized controlled trials.[Erratum for Am J Sports Med. 2015 May;43(5):1265-73; PMID: 25143489]	WRONG PDF
Chang, K. V. 2015	Early Versus Delayed Passive Range of Motion Exercise for Arthroscopic Rotator Cuff Repair: A Meta-analysis of Randomized Controlled Trials.[Erratum appears in Am J Sports Med. 2015 Aug;43(8):NP26; PMID: 26232461]	Meta-analysis
Chang, K. V. 2015	Early Versus Delayed Passive Range of Motion Exercise for Arthroscopic Rotator Cuff Repair: A Meta-analysis of Randomized Controlled Trials	meta-analysis
Chang, K. V. 2017	Static and Dynamic Shoulder Imaging to Predict Initial Effectiveness and Recurrence After Ultrasound-Guided Subacromial Corticosteroid Injections	Not best available evidence
Chang, K. V. 2017	Static and Dynamic Shoulder Imaging to Predict Initial Effectiveness and Recurrence After Ultrasound-Guided Subacromial Corticosteroid Injections	Not best available evidence
Chang, K. V. 2016	Comparative effectiveness of suprascapular nerve block in the relief of acute post-operative shoulder pain: A systematic review and meta-analysis	Systematic review
Chang, R. F. 2016	Computer-Aided Diagnosis of Different Rotator Cuff Lesions Using Shoulder Musculoskeletal Ultrasound	Not best available evidence
Charousset, C. 2005	Accuracy of CT arthrography in the assessment of tears of the rotator cuff	*Not best available (low quality)
Charousset, C. 2005	Accuracy of CT arthrography in the assessment of tears of the rotator cuff	*Not best available (low quality)
Charousset, C. 2007	Can a double-row anchorage technique improve tendon healing in arthroscopic rotator cuff repair?: A prospective, nonrandomized, comparative study of double-row and single-row anchorage techniques with computed tomographic arthrography tendon healing assessment	Duplicate to AAOSID 9966
Charousset, C. 2007	Can a double-row anchorage technique improve tendon healing in arthroscopic rotator cuff repair? A prospective, nonrandomized, comparative study of double-row and single-row anchorage techniques	*not best available

Author	Article Title	Reason for Exclusion
	with computed tomographic arthrography tendon healing assessment	
Charousset, C. 2008	The time for functional recovery after arthroscopic rotator cuff repair: correlation with tendon healing controlled by computed tomography arthrography	Insufficient data-unable to extract multiple regression analysis data
Charousset, C. 2014	Does autologous leukocyte-platelet-rich plasma improve tendon healing in arthroscopic repair of large or massive rotator cuff tears?	Duplicate study (same as AAOSID 1669)
Charousset, C. 2014	Does autologous leukocyte-platelet-rich plasma improve tendon healing in arthroscopic repair of large or massive rotator cuff tears?	*not best available
Chauhan, N. S. 2016	A Prospective Comparative Study of High Resolution Ultrasound and MRI in the Diagnosis of Rotator Cuff Tears in a Tertiary Hospital of North India	no component has both ref standards greater than 10
Chavez-Lopez, M. A. 2009	Methylprednisolone versus triamcinolone in painful shoulder using ultrasound-guided injection	Duplicate study (same as AAOS ID 9469)
Chawla, K. 2017	A Systematic Review of Platelet-Rich Plasma in the Management of Upper Limb Tendinopathies	Systematic review
Checroun, A. J. 1998	Open versus arthroscopic decompression for subacromial impingement. A comprehensive review of the literature from the last 25 years	Narrative review - WRONG PDF
Chelli Bouaziz, M. 2010	Diagnostic accuracy of high resolution ultrasound in communicating rotator cuff tears	*Not best available (moderate quality)
Chen, A. L. 2003	Rotator cuff repair in patients with type I diabetes mellitus	Not applicable to PICO 8; only univariate analysis
Chen, D. Y. 2014	Diagnostic utility of US for detecting rotator cuff tears in rheumatoid arthritis patients: Comparison with magnetic resonance imaging	*Not best available (moderate quality)
Chen, H. S. 2011	A comparison of physical examinations with musculoskeletal ultrasound in the diagnosis of biceps long head tendinitis	*Not best available (moderate quality)
Chen, J. D. 1996	MR imaging of rotator cuff impingement: correlation with full-thickness rotator cuff tear	not a relevant study or review
Chen, L. 2015	Rehabilitation protocol after arthroscopic rotator cuff repair: early versus delayed motion	meta-analysis
Chen, M. 2013	Outcomes of single-row versus double-row arthroscopic rotator cuff repair: a systematic review and meta-analysis of current evidence	Systematic review
Chen, S. 2005	The effects of thermal capsular shrinkage on the outcomes of arthroscopic stabilization for primary anterior shoulder instability	not repairing RC FTT

Author	Article Title	Reason for Exclusion
Chen, S. K. 2008	Treatment for frozen shoulder combined with calcific tendinitis of the supraspinatus	not a relevant study or review
Cheng, A. S. 2007	Randomized controlled trial of workplace-based rehabilitation for work-related rotator cuff disorder	Not relevant to PICOs; excluded pts with shoulder surgery
Cherchi, L. 2016	Critical shoulder angle: Measurement reproducibility and correlation with rotator cuff tendon tears	Not best available evidence
Chester, R. 2010	The impact of subacromial impingement syndrome on muscle activity patterns of the shoulder complex: A systematic review of electromyographic studies	Systematic review
Cheung, E. V. 2008	Locked plating for proximal humeral fractures	Narrative Review
Chi, A. S. 2017	Non-contrast MRI diagnosis of adhesive capsulitis of the shoulder	*Not best available (low quality)
Chi, A. S. 2017	Non-contrast MRI diagnosis of adhesive capsulitis of the shoulder	Not best available evidence
Chiou, H. J. 1996	Sonographic signs of complete rotator cuff tears	*Not best available (low quality)
Cho, C. H. 2015	Clinical outcomes of rotator cuff repair with arthroscopic capsular release and manipulation for rotator cuff tear with stiffness: a matched-pair comparative study between patients with and without stiffness	Not applicable to PICO 8; only univariate analysis
Cho, C. H. 2015	Effect of a sleep aid in analgesia after arthroscopic rotator cuff repair	Not best available evidence
Cho, C. H. 2016	Prognostic Factors Affecting the Clinical Outcome of Septic Arthritis of the Shoulder	retrospective medical record review, non-comparative
Cho, C. H. 2013	The impact of depression and anxiety on self-assessed pain, disability, and quality of life in patients scheduled for rotator cuff repair	Incorrect patient population (Not exclusive to full-thickness tears for prognostic patients)
Cho, C. H. 2013	The impact of depression and anxiety on self-assessed pain, disability, and quality of life in patients scheduled for rotator cuff repair	Pre-operative risk
Cho, C. H. 2012	Early postoperative outcomes between arthroscopic and mini-open repair for rotator cuff tears	Duplicate (A12774)
Cho, C. H. 2015	Efficacy of interscalene block combined with multimodal pain control for postoperative analgesia after rotator cuff repair	Not best available evidence
Cho, C. H. 2011	Multimodal approach to postoperative pain control in patients undergoing rotator cuff repair	Duplicate study (same as AAOSID 12561)
Cho, C. H. 2015	Gender Affects Early Postoperative Outcomes of Rotator Cuff Repair	Incorrect patient population (Not exclusive to full-thickness tears for prognostic patients)

Author	Article Title	Reason for Exclusion
Cho, Ch 2011	Multimodal approach to postoperative pain control in patients undergoing rotator cuff repair	Not best available evidence
Cho, C-H 2012	Early postoperative outcomes between arthroscopic and mini-open repair for rotator cuff tears	*not best available
Cho, J. H. 2015	Pit above the lesser tuberosity in axial view radiography	not a relevant study or review
Cho, N. S. 2014	Funnel tenotomy versus intracuff tenodesis for lesions of the long head of the biceps tendon associated with rotator cuff tears	Not best available evidence
Cho, N. S. 2007	Patient-controlled analgesia after arthroscopic rotator cuff repair: subacromial catheter versus intravenous injection	Duplicate study (same as AAOSID 12497)
Cho, N. S. 2006	Clinical results of arthroscopic bankart repair with knot-tying and knotless suture anchors	Incorrect patient population (not exclusive to $\geq 18$ years of age)
Cho, N. S. 2017	Comparison of Clinical and Radiological Results in the Arthroscopic Repair of Full-Thickness Rotator Cuff Tears With and Without the Anterior Attachment of the Rotator Cable	Not best available evidence
Cho, N. S. 2015	The influence of diabetes mellitus on clinical and structural outcomes after arthroscopic rotator cuff repair	Not applicable to PICO 8; no multivariate analysis
Cho, N. S. 2008	Functional outcome of arthroscopic repair with concomitant manipulation in rotator cuff tears with stiff shoulder	Not applicable to PICO 8; only univariate analysis
Cho, N. S. 2010	Retear patterns after arthroscopic rotator cuff repair: single-row versus suture bridge technique	*not best available
Cho, N. S. 2009	Arthroscopic biceps augmentation for avoiding undue tension in repair of massive rotator cuff tears	Not best available evidence
Cho, Ns 2007	Patient-controlled analgesia after arthroscopic rotator cuff repair: subacromial catheter versus intravenous injection	Not best available evidence
Choi, C. H. 2012	Functional outcomes and structural integrity after double-pulley suture bridge rotator cuff repair using serial ultrasonographic examination	no comparison group, same technique
Choi, E. M. 2015	Effects of ultrasound-guided stellate ganglion block on acute pain after arthroscopic shoulder surgery	block was given PRE op, not POST op
Choo, H. J. 2012	Comparison of three-dimensional isotropic T1-weighted fast spin-echo MR arthrography with two-dimensional MR arthrography of the shoulder	*Not best available (moderate quality)

Author	Article Title	Reason for Exclusion
Chou, C. T. 2015	Efficacy of informed versus uninformed physiotherapy on postoperative retear rates of medium-sized and large rotator cuff tears	same as A12629
Christensen, B. H. 2016	Enhanced function and quality of life following 5 months of exercise therapy for patients with irreparable rotator cuff tears - an intervention study	no control group
Christiansen, D. H. 2015	Physiotherapy after subacromial decompression surgery: Development of a standardised exercise intervention	Systematic review
Christie, A. 2010	Surgical interventions for the rheumatoid shoulder	Systematic review
Christie, Anne 2010	Surgical interventions for the rheumatoid shoulder	systematic review
Chuang, T. Y. 2012	Arthroscopic treatment of rotator cuff tears with shoulder stiffness: a comparison of functional outcomes with and without capsular release	Not best available evidence
Chui, K. K. 2015	Shoulder manual therapy for aging and older adults - Part 1: Subacromial impingement syndrome	Narrative review
Chun, K. A. 2010	Comparisons of the various partial-thickness rotator cuff tears on MR arthrography and arthroscopic correlation	*Not best available (moderate quality)
Chung, S. W. 2017	Altered Gene and Protein Expressions in Torn Rotator Cuff Tendon Tissues in Diabetic Patients	outcomes not relevant to PICOs
Chung, S. W. 2013	Arthroscopic repair of massive rotator cuff tears: outcome and analysis of factors associated with healing failure or poor postoperative function	Not relevant to PICOs;
Ciccone, W. J., 2nd 2008	Assessment of pain relief provided by interscalene regional block and infusion pump after arthroscopic shoulder surgery	Duplicate study (same as AAOSID 9842)
Ciccone, Wj 2008	Assessment of pain relief provided by interscalene regional block and infusion pump after arthroscopic shoulder surgery	Duplicate study (same as AAOSID 9842)
Clar, C. 2014	Clinical effectiveness of manual therapy for the management of musculoskeletal and non-musculoskeletal conditions: Systematic review and update of UK evidence report	Systematic review
Clavert, P. 2005	Panacryl synovitis: fact or fiction?	Very low quality
Clement, N. D. 2010	Does diabetes affect outcome after arthroscopic repair of the rotator cuff?	Not applicable to PICO 8; only univariate analysis
Clement, N. D. 2015	Short-Term Outcome After Arthroscopic Bursectomy Debridement of Rotator Cuff Calcific Tendonopathy With and Without Subacromial Decompression: A Prospective Randomized Controlled Trial	pts w/calcific tendonitis, not tears

Author	Article Title	Reason for Exclusion
Clement, Nd 2015	Short-Term Outcome After Arthroscopic Bursectomy Debridement of Rotator Cuff Calcific Tendonopathy With and Without Subacromial Decompression: A Prospective Randomized Controlled Trial	pts do not have tears, just tendonitis
Co, S. 2012	Comparison of 2- and 3-dimensional shoulder ultrasound to magnetic resonance imaging in a community hospital for the detection of supraspinatus rotator cuff tears with improved worktime room efficiency	*Not best available (moderate quality)
Cochet, H. 2010	Rotator cuff tears: should abduction and external rotation (ABER) positioning be performed before image acquisition? A CT arthrography study	not a relevant study or review
Codding, J. L. 2018	Natural History of Degenerative Rotator Cuff Tears	Natural History
Coghlan, J. A. 2008	Surgery for rotator cuff disease	Systematic review
Coghlan, J. A. 2008	Efficacy and safety of a subacromial continuous ropivacaine infusion for post-operative pain management following arthroscopic rotator cuff surgery: a protocol for a randomised double-blind placebo-controlled trial	Study protocol
Coghlan, J. A. 2009	Efficacy of subacromial ropivacaine infusion for rotator cuff surgery. A randomized trial	Duplicate study (same as AAOSID 12609)
Cohen, D. B. 2006	Outcomes of isolated type II SLAP lesions treated with arthroscopic fixation using a bioabsorbable tack	Retrospective case series
Cole, B. 2016	Not all ultrasounds are created equal: general sonography versus musculoskeletal sonography in the detection of rotator cuff tears	*Not best available (low quality)
Cole, B. J. 2017	Patient Understanding, Expectations, and Satisfaction Regarding Rotator Cuff Injuries and Surgical Management	Systematic review
Cole, B. J. 2007	Arthroscopic rotator cuff repair: Prospective functional outcome and repair integrity at minimum 2-year follow-up	*not best available and no comparison group
Cole, B. J. 2010	Platelet-rich plasma: where are we now and where are we going?	Systematic review
Colegate-Stone, T. 2009	An analysis of outcome of arthroscopic versus mini-open rotator cuff repair using subjective and objective scoring tools	*not best available
Coleman, S. H. 2007	Arthroscopic repair of type II superior labral anterior posterior lesions with and without acromioplasty: a clinical analysis of 50 patients	Not best available evidence

Author	Article Title	Reason for Exclusion
Coleman, S. H. 2007	Arthroscopic repair of type II superior labral anterior posterior lesions with and without acromioplasty: A clinical analysis of 50 patients	Duplicate study (AAOS ID 3647)
Colen, S. 2012	Hyaluronic acid for the treatment of osteoarthritis in all joints except the Knee: What is the current evidence?	Systematic Review
Collin, P. 2015	Prospective evaluation of clinical and radiologic factors predicting return to activity within 6 months after arthroscopic rotator cuff repair	Not applicable to PICO 8; only 6 months follow-up post-op
Collin, P. 2016	Posterosuperior rotator cuff repair by an independent double-row technique. Technical note and radiological and clinical results	no comparison group, only one surgical technique
Collin, P. 2015	What is the Best Clinical Test for Assessment of the Teres Minor in Massive Rotator Cuff Tears?	*Not best available (low quality)
Collin, P. 2015	What is the Best Clinical Test for Assessment of the Teres Minor in Massive Rotator Cuff Tears?	N/A
Collin, P. 2015	Evaluating postoperative rotator cuff healing: Prospective comparison of MRI and ultrasound	N/A
Collin, P. 2015	Evaluating postoperative rotator cuff healing: Prospective comparison of MRI and ultrasound	Does not address diagnostic question of interest
Collin, P. G. 2015	Is rehabilitation effective in massive rotator cuff tears?	no intervention, rehab program
Connell, D. 2002	Adhesive capsulitis: Role of MR imaging in differential diagnosis	diagnosing frozen shoulder, not tears
Connelly, T. M. 2015	Outcome of open massive rotator cuff repairs with double-row suture knotless anchors: case series	Retrospective case series
Connor, P. M. 2000	Comparison of arthroscopic and open revision decompression for failed anterior acromioplasty	*not best available
Consigliere, P. 2017	Preliminary Results of a Consecutive Series of Large & Massive Rotator Cuff Tears Treated with Arthroscopic Rotator Cuff Repairs Augmented with Extracellular Matrix	no comparison group
Conti, M. 2009	Post-operative rehabilitation after surgical repair of the rotator cuff	Background article
Cook, C. 2012	Diagnostic accuracy of five orthopedic clinical tests for diagnosis of superior labrum anterior posterior (SLAP) lesions.[Erratum appears in J Shoulder Elbow Surg. 2012 May;21(5):707]	*Not best available (moderate quality)
Cook, T. 2018	Are corticosteroid injections more beneficial than anaesthetic injections alone in the management of	Systematic review

Author	Article Title	Reason for Exclusion
	rotator cuff-related shoulder pain? A systematic review	
Cools, A. 2006	Isokinetic muscle strength and functional restoration following surgical repair of the rotator cuff: A prospective study	Not applicable to PICO 8
Coombes, B. K. 2010	Efficacy and safety of corticosteroid injections and other injections for management of tendinopathy: A systematic review of randomised controlled trials	Meta-analysis
Cordasco, F. A. 2002	The partial-thickness rotator cuff tear: is acromioplasty without repair sufficient?	no comparison; all received the same surgery
Cordasco, F. A. 2010	Subacromial injection improves deltoid firing in subjects with large rotator cuff tears	no comparison treatment; all groups received same injection
Correa, M. C. 2008	Beach chair position with instrumental distraction for arthroscopic and open shoulder surgeries	not a relevant study or review
Cowling, P. D. 2016	What is a Bristow-Latarjet procedure?: A review of the described operative techniques and outcomes	Systematic review
Craft, D. V. 1996	Fixation strength of rotator cuff repairs with suture anchors and the transosseous suture technique	cadaver study
Crawshaw, D. P. 2010	Exercise therapy after corticosteroid injection for moderate to severe shoulder pain: Large pragmatic randomised trial	Not best available evidence
Cuff, D. J. 2016	Evaluation of Factors Affecting Acute Postoperative Pain Levels After Arthroscopic Rotator Cuff Repair	Incorrect patient population (Not exclusive to full-thickness tears for prognostic patients)
Cuff, D. J. 2016	Evaluation of Factors Affecting Acute Postoperative Pain Levels After Arthroscopic Rotator Cuff Repair	Incorrect patient population (not exclusive to full-thickness tears)
Cuff, D. J. 2012	Prospective evaluation of postoperative compliance and outcomes after rotator cuff repair in patients with and without workers' compensation claims	Not relevant to PICOs;
Cuff, D. J. 2012	Prospective randomized study of arthroscopic rotator cuff repair using an early versus delayed postoperative physical therapy protocol	same as A12549
Cuff, D. J. 2016	Rehabilitation Strategies after Rotator Cuff Repair: How to Optimize Outcomes	Narrative review
Culebras, X. 2001	Clonidine combined with a long acting local anesthetic does not prolong postoperative analgesia after brachial plexus block but does induce hemodynamic changes	Duplicate study (same as AAOSID 12903)
Cullen, D. M. 2007	Diagnostic accuracy of shoulder ultrasound performed by a single operator	*Not best available (moderate quality)



Author	Article Title	Reason for Exclusion
Cummins, C. A. 2003	Mode of failure for rotator cuff repair with suture anchors identified at revision surgery	Very low quality
Cumpston, M. 2009	Topical glyceryl trinitrate for rotator cuff disease	Not relevant to PICOs; did not analyze covariates
Curry, E. J. 2015	Structural Characteristics Are Not Associated With Pain and Function in Rotator Cuff Tears: The ROW Cohort Study	unrelated to any PICO
Cutts, S. 2009	Anterior shoulder dislocation	Narrative review
Dabija, D. I. 2017	Genetic and familial predisposition to rotator cuff disease: a systematic review	Not relevant to PICOs;
D'Ambrosi, R. 2016	Platelet-rich plasma supplementation in arthroscopic repair of full-thickness rotator cuff tears: a randomized clinical trial	Not applicable to PICO 9; Follow-up less than 1 year
D'Ambrosi, R. 2016	Platelet-rich plasma supplementation in arthroscopic repair of full-thickness rotator cuff tears: a randomized clinical trial	Duplicate article; same as AAOS ID 331
Danninger, T. 2015	Factors associated with hospital admission after rotator cuff repair: the role of peripheral nerve blockade	Not best available evidence
Davidson, J. F. 2005	Use of preoperative magnetic resonance imaging to predict rotator cuff tear pattern and method of repair	no comparison modality to MRI
Davis, A. D. 2010	Arthroscopic versus open acromioplasty: a meta-analysis	Meta analysis
Davis, D. E. 2017	Shoulder Synovial Fluid Lipoprotein Levels and Their Relationship to the Rotator Cuff	Insufficient prognostic data
Day, M. 2016	Physician training: Ultrasound and accuracy of diagnosis in rotator cuff tears	*Not best available (low quality)
De Candia, A. 2003	Real-time compound sonography of the rotator-cuff: evaluation of artefact reduction and image definition	*Not best available (moderate quality)
de Carli, A. 2012	Reparable rotator cuff tears with concomitant long-head biceps lesions: Tenotomy or tenotomy/tenodesis?	same as A12640
de Castro Veado, M. A. 2011	Prospective and Comparative Study on Functional Outcomes after Open and Arthroscopic Repair of Rotator Cuff Tears	*not best available
de Castro Veado, M. A. 2015	Rotator cuff injury in patients over the age of 65 years: evaluation of function, integrity and strength	Not relevant to PICO 3; no comparison group
de Jesus, J. O. 2009	Accuracy of MRI, MR arthrography, and ultrasound in the diagnosis of rotator cuff tears: a meta-analysis	Meta-analysis

Author	Article Title	Reason for Exclusion
de Moraes, V. Y. 2013	Influence of compensation status on time off work after carpal tunnel release and rotator cuff surgery: a meta-analysis	Meta-analysis
De Moraes, B. S. 2012	Postoperative Analgesic Efficacy of Different Volumes and Masses of Ropivacaine in Posterior Brachial Plexus Block	Not best available evidence
de Souza, M. C. 2009	Progressive resistance training in patients with shoulder impingement syndrome: Literature review	Narrative Review
De Winter, A. F. 1999	Diagnostic classification of shoulder disorders: Interobserver agreement and determinants of disagreement	no specificity, sensitivity or accuracy measurements; comparing interobserver agreements
de Witte, P. B. 2017	Rotator Cuff Calcific Tendinitis: Ultrasound-Guided Needling and Lavage Versus Subacromial Corticosteroids: Five-Year Outcomes of a Randomized Controlled Trial	Not best available evidence
de Witte, P. B. 2016	Heterogeneous MR arthrography findings in patients with subacromial impingement syndrome â?? Diagnostic subgroups?	not diagnosing RC tear
Dean, B. J. 2013	The peripheral neuronal phenotype is important in the pathogenesis of painful human tendinopathy: a systematic review	systematic review
Defroda, S. F. 2016	Surgical Management of the Aging Athlete	Narrative review
Degreef, I. 2005	Treatment of irreparable rotator cuff tears by latissimus dorsi muscle transfer	<20 patients
DeHaan, A. M. 2012	Does double-row rotator cuff repair improve functional outcome of patients compared with single-row technique? A systematic review	Systematic review
Delaunay, L. 2005	Analgesia after arthroscopic rotator cuff repair: subacromial versus interscalene continuous infusion of ropivacaine	Not best available evidence
Demirel, A. 2018	Ultrasound elastography-based assessment of the elasticity of the supraspinatus muscle in impingement syndrome: does elastography has any diagnostic value?	Not best available
Denard, P. J. 2012	Long-term outcome of arthroscopic massive rotator cuff repair: The importance of double-row fixation	*not best available
Denard, P. J. 2012	Long-term outcome of arthroscopic massive rotator cuff repair: the importance of double-row fixation	*not best available
Denard, P. J. 2012	Pseudoparalysis: the importance of rotator cable integrity	no index test

Author	Article Title	Reason for Exclusion
Denard, P. J. 2016	Immediate versus delayed passive range of motion following total shoulder arthroplasty	Not best available evidence
Denard, P. J. 2011	Prevention and management of stiffness after arthroscopic rotator cuff repair: Systematic review and implications for rotator cuff healing	Systematic review
Denard, P. J. 2011	Prevention and management of stiffness after arthroscopic rotator cuff repair: systematic review and implications for rotator cuff healing	Systematic Review
DePalma, A. F. 2008	The classic. Surgical anatomy of the rotator cuff and the natural history of degenerative periarthritis. Surg Clin North Am. 1963;43:1507-1520	Natural History-WRONG PDF
Deranlot, J. 2017	Arthroscopic Subacromial Spacer Implantation in Patients With Massive Irreparable Rotator Cuff Tears: Clinical and Radiographic Results of 39 Retrospectives Cases	one group only
Desjardins-Charbonneau, A. 2015	The efficacy of manual therapy for rotator cuff tendinopathy: a systematic review and meta-analysis	Systematic review
Desmeules, F. 2016	Efficacy of exercise therapy in workers with rotator cuff tendinopathy: a systematic review	Systematic review
Desmeules, F. 2016	Efficacy of transcutaneous electrical nerve stimulation for rotator cuff tendinopathy: A systematic review	Systematic Review
Desmeules, F. 2016	Efficacy of transcutaneous electrical nerve stimulation for rotator cuff tendinopathy: a systematic review	Systematic review
Desmeules, F. 2015	The efficacy of therapeutic ultrasound for rotator cuff tendinopathy: A systematic review and meta-analysis	systematic review
Desroches, A. 2016	Suprascapular Nerve Block Versus Interscalene Block as Analgesia After Arthroscopic Rotator Cuff Repair: A Randomized Controlled Noninferiority Trial	Not best available evidence
Deurzen, Dfp 2016	Long head Biceps TENodesis or tenotomy in arthroscopic rotator cuff repair: BITE study protocol	study protocol, no results
Dezaly, C. 2011	Arthroscopic treatment of rotator cuff tear in the over-60s: Repair is preferable to isolated acromioplasty-tenotomy in the short term	*not best available
Dezaly, C. 2011	Arthroscopic treatment of rotator cuff tear in the over-60s: repair is preferable to isolated acromioplasty-tenotomy in the short term	Duplicate study (same as AAOSID 8540)
Dhar, Y. 2013	Arthroscopic rotator cuff repair: impact of diabetes mellitus on patient outcomes	Not applicable to PICO 8; no relevant risk factors

Author	Article Title	Reason for Exclusion
Di Benedetto, P. 2016	Arthroscopic rotator cuff repair with or without PrP: our experience	Not best available evidence
Di Lorenzo, L. 2006	Pain relief in early rehabilitation of rotator cuff tendinitis: Any role for indirect suprascapular nerve block?	Not best available evidence
Di Paola, J. 2013	Limited physical therapy utilization protocol does not affect impairment and disability in Workers' Compensation patients after rotator cuff repair: a short-term follow-up study	Not best available evidence
Di Schino, M. 2012	Does open repair of anterosuperior rotator cuff tear prevent muscular atrophy and fatty infiltration? shoulder	no comparison group
Dickinson, R. N. 2017	A systematic review of cost-effective treatment of postoperative rotator cuff repairs	Systematic review
Diebold, G. 2017	Relationship Between Age and Rotator Cuff Retear: A Study of 1,600 Consecutive Rotator Cuff Repairs	Incorrect patient population (not exclusive to 18+ years of age)
Diebold, G. 2017	Relationship between Age and Rotator Cuff Retear	Duplicate article; same as 13240
Diehr, S. 2006	What is the best way to diagnose a suspected rotator cuff tear?	Meta-analysis
Dierickx, C. 1994	Massive rotator cuff tears treated by a deltoid muscular inlay flap	Case series
Dietrich, T. J. 2016	Ultrasound of the coracoacromial ligament in asymptomatic volunteers and patients with shoulder impingement	no tear diagnosis, group with healthy pts
Dietrich, T. J. 2015	Is the lateral extension of the acromion related to the outcome of shoulder injections?	Not best available evidence
Dinnes, J. 2003	The effectiveness of diagnostic tests for the assessment of shoulder pain due to soft tissue disorders: a systematic review	Systematic review
DiSilvestro, K. J. 2016	When Can I Drive After Orthopaedic Surgery? A Systematic Review	Systematic review
Dodenhoff, R. M. 2000	Manipulation under anesthesia for primary frozen shoulder: effect on early recovery and return to activity	Does not address prognostic question of interest
Dong, W. 2015	Treatments for shoulder impingement syndrome a prisma systematic review and network meta-analysis	Systematic review/ meta analysis
Donigan, J. A. 2011	Arthroscopic subacromial decompression: acromioplasty versus bursectomy alone--does it really matter? A systematic review	Systematic review

Author	Article Title	Reason for Exclusion
Dorman, B. H. 1994	Postoperative analgesia after major shoulder surgery with interscalene brachial plexus blockade: Etidocaine versus bupivacaine	19 pts in 2 groups
Dorrestijn, O. 2009	Conservative or surgical treatment for subacromial impingement syndrome? A systematic review	Systematic review
Downie, B. K. 2012	Treatment of rotator cuff tears in older individuals: a systematic review	Systematic review
Drakeford, M. K. 1990	A comparative study of ultrasonography and arthrography in evaluation of the rotator cuff	*Not best available (moderate quality)
Du Plessis, M. 2011	The effectiveness of continuous passive motion on range of motion, pain and muscle strength following rotator cuff repair: a systematic review	Systematic Review
Duc, C. 2013	Distribution of arm velocity and frequency of arm usage during daily activity: objective outcome evaluation after shoulder surgery	not a relevant study or review
Duc, S. R. 2006	Diagnostic performance of MR arthrography after rotator cuff repair	Does not address diagnostic question of interest
Duncan, N. S. 2015	Surgery within 6 months of an acute rotator cuff tear significantly improves outcome	Not relevant to PICO's;
Dunn, W. R. 2016	2013 Neer Award: predictors of failure of nonoperative treatment of chronic, symptomatic, full-thickness rotator cuff tears	non-operative treatment
Dunn, W. R. 2016	2013 Neer Award: predictors of failure of nonoperative treatment of chronic, symptomatic, full-thickness rotator cuff tears	Does not address prognostic question of interest (non-operative patients)
Duquin, T. R. 2010	Which method of rotator cuff repair leads to the highest rate of structural healing? A systematic review	Systematic review
Duralde, X. A. 2005	The technique of arthroscopic repair of partial thickness rotator cuff tears	Prospective case series
Duzgun, I. 2011	Comparison of slow and accelerated rehabilitation protocol after arthroscopic rotator cuff repair: pain and functional activity	Not best available evidence
Dwivedi, A. 2017	Role of MRI imaging in a series of cases with biceps injuries of the shoulder	not a study
Dwyer, T. 2015	Association between pre-operative magnetic resonance imaging and reparability of large and massive rotator cuff tears	not a relevant study or review
Dwyer, T. 2015	Full-thickness rotator cuff tears in patients younger than 55 years: clinical outcome of arthroscopic repair in comparison with older patients	Not applicable to PICO 8; no multivariate analysis

Author	Article Title	Reason for Exclusion
Dyson-Hudson, T. A. 2004	Shoulder pain in chronic spinal cord injury, Part I: Epidemiology, etiology, and pathomechanics	Systematic review
Ebert, J. R. 2017	A Midterm Evaluation of Postoperative Platelet-Rich Plasma Injections on Arthroscopic Supraspinatus Repair: A Randomized Controlled Trial	Not best available evidence
Edouard, P. 2011	Reliability of isokinetic assessment of shoulder-rotator strength: a systematic review of the effect of position	Systematic review
Edwards, T. B. 2012	Inferior tilt of the glenoid component does not decrease scapular notching in reverse shoulder arthroplasty: results of a prospective randomized study	all pts have RC tear arthropathy
Edwards, T. B. 2006	Repair of tears of the subscapularis. Surgical technique	no comparison group
Edwards, T. B. 2006	Repair of tears of the subscapularis. Surgical technique	concomitant vs. concomitant
Ejnisman, B. 2004	Interventions for tears of the rotator cuff in adults	Systematic review
Ekeberg, O. M. 2010	Clinical, socio-demographic and radiological predictors of short-term outcome in rotator cuff disease	does not fit PICO 12; prognostic study that would not fit PICO 8
El-Azab, H. 2010	Clinical and structural evaluation of arthroscopic double-row suture-bridge rotator cuff repair: early results of a novel technique	no comparison group
El-Dalati, G. 2005	Standard sonography and arthrosonography in the study of rotator cuff tears	*Not best available (moderate quality)
El-Dalati, G. 2005	Standard sonography and arthrosonography in the study of rotator cuff tears	8 pts from study test negative for tears
Elhassan, B. 2008	Transfer of pectoralis major for the treatment of irreparable tears of subscapularis: Does it work?	no comparison groups; only group 3 has a massive RCT
Elhassan, B. T. 2016	Outcome of lower trapezius transfer to reconstruct massive irreparable posterior-superior rotator cuff tear	Retrospective case series
Eljabu, W. 2015	The natural history of rotator cuff tears: a systematic review	Natural History+systematic review
El-Kouba, G. 2010	Comparison of Complementary Exams in the Diagnosis of Rotator Cuff Injuries	*Not best available (low quality)
El-Liethy, N. 2016	Role of conventional MRI and MR arthrography in evaluating shoulder joint capsulolabral-ligamentous injuries in athletic versus non-athletic population	*Not best available (moderate quality)

Author	Article Title	Reason for Exclusion
Elmorsy, A. 2017	Accuracy of ultrasonography (US) and magnetic resonance imaging (MRI) in detection of rotator cuff tears in district general hospital	Not best available evidence
Engelbrechtsen, K. 2011	Supervised exercises compared with radial extracorporeal shock-wave therapy for subacromial shoulder pain: 1-year results of a single-blind randomized controlled trial	not a relevant study or review
Engelbrechtsen, K. 2009	Radial extracorporeal shockwave treatment compared with supervised exercises in patients with subacromial pain syndrome: single blind randomised study	Not relevant to PICO; excluded pts with shoulder surgery
Erggelet, C. 1999	Postoperative ossifications of the shoulder. Incidence and clinical impact	Not applicable to PICO 8; pts w/ arthropathy
Erickson, B. J. 2017	The Effect of Concomitant Biceps Tenodesis on Reoperation Rates After Rotator Cuff Repair: A Review of a Large Private-Payer Database From 2007 to 2014	Incorrect patient population (includes <18 years of age)
Erickson, B. J. 2016	The Effect of Humeral Inclination on Range of Motion in Reverse Total Shoulder Arthroplasty: A Systematic Review	Systematic Review
Erickson, J. 2015	Surgical treatment of symptomatic superior labrum anterior-posterior tears in patients older than 40 years: a systematic review	Systematic review
Ernst, E. 2009	Acupuncture: What Does the Most Reliable Evidence Tell Us?	Systematic review
Ertan, S. 2015	Medium-term natural history of subacromial impingement syndrome	Duplicate to AAOS ID 1189 (Natural History)
Ertan, S. 2015	Medium-term natural history of subacromial impingement syndrome	Natural History
Etancelin-Jamet, M. 2017	Diagnostic value of angled oblique sagittal images of the supraspinatus tendon for the detection of rotator cuff tears on MR imaging	*Not best available (moderate quality)
Etancelin-Jamet, M. 2017	Diagnostic value of angled oblique sagittal images of the supraspinatus tendon for the detection of rotator cuff tears on MR imaging	Not best available evidence
Ettinger, L. 2014	Subacromial injection results in further scapular dyskinesis	same injection given to groups of impingement AND healthy pts
Eyigor, C. 2010	Are intra-articular corticosteroid injections better than conventional TENS in treatment of rotator cuff tendinitis in the short run? A randomized study	does not fit PICO 12; no surgical treatment

Author	Article Title	Reason for Exclusion
Fabbri, M. 2016	Muscle atrophy and fatty infiltration in rotator cuff tears: Can surgery stop muscular degenerative changes?	Duplicate article (AAOSID 343)
Fabbri, M. 2016	Muscle atrophy and fatty infiltration in rotator cuff tears: Can surgery stop muscular degenerative changes?	Duplicate to AAOSID 13321
Fabbri, M. 2016	Muscle atrophy and fatty infiltration in rotator cuff tears: Can surgery stop muscular degenerative changes?	Excluded at final meeting
Faber, E. 2006	Treatment of impingement syndrome: a systematic review of the effects on functional limitations and return to work	Systematic Review
Factor, D. 2014	Current concepts of rotator cuff tendinopathy	Systematic Review
Fama, G. 2004	The role of concomitant biceps tenodesis in shoulder arthroplasty for primary osteoarthritis: Results of a multicentric study	Imperfect comparison group
Familiari, F. 2015	Is acromioplasty necessary in the setting of full-thickness rotator cuff tears? A systematic review	Systematic review
Familiari, F. 2015	Is acromioplasty necessary in the setting of full-thickness rotator cuff tears? A systematic review	Systematic review
Fanelli, G. P. 2007	64-slice MDCT arthrography in shoulder instability: our experience	*Not best available (moderate quality)
Farin, P. 1996	Sonographic detection of tears of the anterior portion of the rotator cuff (subscapularis tendon tears)	less than 20 pts total
Farin, P. U. 1995	Digital subtraction shoulder arthrography in determining site and size of rotator cuff tear	*Not best available (low quality)
Farin, P. U. 1995	Acute traumatic tears of the rotator cuff: value of sonography	*Not best available (moderate quality)
Farin, P. U. 1996	Site and size of rotator-cuff tear: Findings at ultrasound, double-contrast arthrography, and computed tomography arthrography with surgical correlation	*Not best available (moderate quality)
Farin, P. U. 1996	Site and size of rotator-cuff tear. Findings at ultrasound, double-contrast arthrography, and computed tomography arthrography with surgical correlation	*Not best available (moderate quality)
Farley, T. E. 1992	Full-thickness tears of the rotator cuff of the shoulder: diagnosis with MR imaging	*Not best available (moderate quality)
Farley, T. E. 1994	The coracoacromial arch: MR evaluation and correlation with rotator cuff pathology	*Not best available evidence



Author	Article Title	Reason for Exclusion
Farmer, N. 2014	An update and further testing of a knowledge-based diagnostic clinical decision support system for musculoskeletal disorders of the shoulder for use in a primary care setting	Relevant?
Farshad-Amacker, N. A. 2015	Partial supraspinatus tears are associated with tendon lengthening	not a relevant study or review
Favard, L. 2009	Massive rotator cuff tears in patients younger than 65 years. What treatment options are available?	Not applicable to PICO 10; imperfect comparison
Favard, L. 2009	Massive rotator cuff tears in patients younger than 65 years. What treatment options are available?	Not relevant to PICOs;
Fealy, S. 2006	Patterns of vascular and anatomical response after rotator cuff repair	not a relevant study or review
Feng, S. 2003	Prognostic indicators for outcome following rotator cuff tear repair	Incorrect patient population (Not exclusive to full-thickness tears for prognostic patients)
Fenlin Jr, J. M. 2002	Tuberoplasty: Creation of an acromiohumeral articulation - A treatment option for massive, irreparable rotator cuff tears	Incorrect patient population
Ferguson, D. P. 2016	Graft Utilization in the Augmentation of Large-to-Massive Rotator Cuff Repairs: A Systematic Review	Systematic review
Ferland, M. 1999	Rotator cuff imaging using bursography coupled to helical computed arthrotomography	no comparison
Fermont, A. J. 2015	Prognostic factors for recovery after arthroscopic rotator cuff repair: a prognostic study	Incorrect patient population (Not exclusive to full-thickness tears for prognostic patients)
Fermont, A. J. 2014	Prognostic factors for successful recovery after arthroscopic rotator cuff repair: a systematic literature review	Systematic review
Ferrari, F. S. 2002	Supraspinatus tendon tears: comparison of US and MR arthrography with surgical correlation	*Not best available (moderate quality)
Ferree, S. 2016	Tertiary survey in polytrauma patients should be an ongoing process	only 5 pts in RCT group
Ferri, M. 2005	Sonography of full-thickness supraspinatus tears: Comparison of patient positioning technique with surgical correlation	all patients diagnosed with FTT of RC
Fialka, C. 2008	Primary hemiarthroplasty in four-part fractures of the proximal humerus: Randomized trial of two different implant systems	*not best available
Filho, R. B. 2012	Results of Surgical Treatment of Denerative Arthropathy of the Rotator Cuff Using Hemiarthroplasty- Cta()	no comparison group

Author	Article Title	Reason for Exclusion
Filippucci, E. 2013	Ultrasound imaging for the rheumatologist xlvii. ultrasound of the shoulder in patients with gout and calcium pyrophosphate deposition disease	*Not best available (moderate quality)
Finestone, A. 2009	Bracing in external rotation for traumatic anterior dislocation of the shoulder	contains pts less than 18 years old;
Fink Barnes, L. A. 2017	Satisfaction, function and repair integrity after arthroscopic versus mini-open rotator cuff repair	Very low quality
Fischer, C. A. 2015	Ultrasound vs. MRI in the assessment of rotator cuff structure prior to shoulder arthroplasty	*Not best available (moderate quality)
Fitzgerald, M. 2018	Computed tomography underestimates rotator cuff pathology in patients with glenohumeral osteoarthritis	Not best available evidence
Flanagan, B. A. 2016	Midterm clinical outcomes following arthroscopic transosseous rotator cuff repair	no comparison
Flannigan, B. 1990	MR arthrography of the shoulder: comparison with conventional MR imaging	negative ref std is less than 10
Fletcher, M. D. 2013	Infraspinatus/Teres minor transfer biceps in situ tenodesis procedure: initial results of a technique for massive cuff tears	no comparison group
Flurin, P. H. 2013	Rotator cuff tears after 70years of age: A prospective, randomized, comparative study between decompression and arthroscopic repair in 154 patients	Imperfect comparison group
Flurin, P. H. 2013	Rotator cuff tears after 70 years of age: a prospective, randomized, comparative study between decompression and arthroscopic repair in 154 patients	Imperfect comparison group
Flurin, P. H. 2017	Osteoarthritis after rotator cuff repair: A 10-year follow-up study	risk factors for glenohumeral arthritis, not prognostic factors for RCT
Flurin, P. H. 2007	Cuff Integrity After Arthroscopic Rotator Cuff Repair: Correlation With Clinical Results in 576 Cases	Not applicable to PICO 8; no multivariate analysis
Flurin, Ph 2013	Rotator cuff tears after 70 years of age: a prospective, randomized, comparative study between decompression and arthroscopic repair in 154 patients	Duplicate study (same as AAOSID 1811)
Flury, M. 2016	Does Pure Platelet-Rich Plasma Affect Postoperative Clinical Outcomes After Arthroscopic Rotator Cuff Repair? A Randomized Controlled Trial	Not applicable to PICO 8; non-steroid injections included post-op

Author	Article Title	Reason for Exclusion
Foad, A. 2012	The accuracy of magnetic resonance imaging and magnetic resonance arthrogram versus arthroscopy in the diagnosis of subscapularis tendon injury	*Not best available (moderate quality)
Fodor, D. 2009	Shoulder impingement syndrome: correlations between clinical tests and ultrasonographic findings	diagnosis of SIS, not RCT
Forsythe, B. 2010	Concomitant arthroscopic SLAP and rotator cuff repair	Not best available evidence
Forsythe, B. 2011	Concomitant arthroscopic SLAP and rotator cuff repair: surgical technique	Background article
Foti, G. 2017	MR arthrography of the shoulder: evaluation of isotropic 3D intermediate-weighted FSE and hybrid GRE T1-weighted sequences	*Not best available (moderate quality)
Fotiadou, A. N. 2008	Ultrasonography of symptomatic rotator cuff tears compared with MR imaging and surgery	*Not best available (moderate quality)
Fowler, E. M. 2010	Clinical and arthroscopic findings in recreationally active patients	*Not best available (moderate quality)
Franceschi, F 2007	To detach the long head of the biceps tendon after tenodesis or not: outcome analysis at the 4-year follow-up of two different techniques	No isolated RC repair only
Franceschi, F 2008	No advantages in repairing a type II superior labrum anterior and posterior (SLAP) lesion when associated with rotator cuff repair in patients over age 50: a randomized controlled trial	concomitant vs. concomitant treatment
Franceschi, F. 2008	Circulating substance P levels and shoulder joint contracture after arthroscopic repair of the rotator cuff	Does not address prognostic question of interest
Franceschi, F. 2007	To detach the long head of the biceps tendon after tenodesis or not: outcome analysis at the 4-year follow-up of two different techniques	No isolated RC repair group
Franceschi, F. 2008	No advantages in repairing a type II superior labrum anterior and posterior (SLAP) lesion when associated with rotator cuff repair in patients over age 50: a randomized controlled trial	concomitant vs. concomitant repair; repeat article
Franceschi, F. 2016	Double-Row Repair Lowers the Retear Risk After Accelerated Rehabilitation	Duplicate study (same as AAOSID 12498)
Franceschi, F. 2014	Obesity as a risk factor for tendinopathy: A systematic review	Systematic review - WRONG PDF
Franceschi, F. 2007	Equivalent clinical results of arthroscopic single-row and double-row suture anchor repair for rotator cuff tears: a randomized controlled trial	Duplicate study (same as AAOSID 9961)

Author	Article Title	Reason for Exclusion
Frangiamore, S. J. 2015	Synovial fluid interleukin-6 as a predictor of periprosthetic shoulder infection	Does not address diagnostic question of interest
Fredrickson, M. J. 2008	Continuous interscalene analgesia for rotator cuff repair: a retrospective comparison of effectiveness and cost in 205 patients from a multi-provider private practice setting	Not best available evidence
Fredrickson, Mj 2011	Patient-initiated mandatory boluses for ambulatory continuous interscalene analgesia: an effective strategy for optimizing analgesia and minimizing side-effects	Duplicate study (same as AAOSID 2775)
Frei, R. 2008	Arthroscopic evaluation of ultrasonography and magnetic resonance imaging for diagnosis of rotator cuff tear	Same as AAOS ID 3392
Frei, R. 2008	Arthroscopic evaluation of ultrasonography and magnetic resonance imaging for diagnosis of rotator cuff tear	negative ref std is less than 10
Friedman, R. J. 2017	Comparison of reverse total shoulder arthroplasty outcomes with and without subscapularis repair	Not applicable to PICOs
Friedman, R. L. 1993	Ultrasonography of the rotator cuff: Analysis of results in a community setting	*Not best available (moderate quality)
Frizziero, A. 2017	Extracorporeal shockwaves therapy versus hyaluronic acid injection for the treatment of painful non-calcific rotator cuff tendinopathies: preliminary results	Not best available evidence
Fu, C. J. 2017	Evaluation of platelet-rich plasma and fibrin matrix to assist in healing and repair of rotator cuff injuries: a systematic review and meta-analysis	systematic review
Fu, C. J. 2017	Evaluation of platelet-rich plasma and fibrin matrix to assist in healing and repair of rotator cuff injuries: a systematic review and meta-analysis	Systematic review
Fucntese, S. F. 2012	Evolution of nonoperatively treated symptomatic isolated full-thickness supraspinatus tears	Natural History
Furukawa, R. 2014	Diagnostic accuracy of magnetic resonance imaging for subscapularis tendon tears using radial-slice magnetic resonance images	*Not best available (low quality)
G��ksu, H. 2016	The comparative efficacy of kinesio taping and local injection therapy in patients with subacromial impingement syndrome	Not best available evidence
G��ckel, C. 1998	MR arthrographic findings in tenosynovitis of the long bicipital tendon of the shoulder	Incorrect patient population (<10 patients/total groups)

Author	Article Title	Reason for Exclusion
Gadea, F. 2012	Shoulder hemiarthroplasty: Outcomes and long-term survival analysis according to etiology	no comparison group
Gaenslen, E. S. 1996	Magnetic resonance imaging for evaluation of failed repairs of the rotator cuff. Relationship to operative findings	all pts had tears according to ref std;
Gagnier, J. J. 2013	A prospective follow-up of patients treated surgically or non-surgically for full-thickness rotator cuff tears	Poster presentation
Gagnier, J. J. 2014	A Prospective Cohort Study of Patients Treated Surgically or Non-Surgically for Full-thickness Rotator Cuff Tears	Very low quality
Galace De Freitas, D. 2014	Pulsed electromagnetic field and exercises in patients with shoulder impingement syndrome: A randomized, double-blind, placebo-controlled clinical trial	pts have SIS, but did not undergo surgery
Galanopoulos, I. 2017	The Impact of Re-tear on the Clinical Outcome after Rotator Cuff Repair Using Open or Arthroscopic Techniques - A Systematic Review	Systematic Review
Gallagher, B. P. 2015	Early versus delayed rehabilitation following arthroscopic rotator cuff repair: A systematic review	Systematic Review
Garcia Parra, P. 2016	Correlation between physical examination and intraoperative findings in shoulder disease treated by arthroscopy. Statistical analysis of 150 patients	*Not best available (moderate quality)
Garcia, G. H. 2017	Hyperlipidemia increases the risk of retear after arthroscopic rotator cuff repair	Not applicable to PICO 8; no multivariate analysis
Garg, N. 2014	Intra-articular and soft tissue injections, a systematic review of relative efficacy of various corticosteroids	Systematic review
Garofalo, R. 2016	Massive irreparable rotator cuff tear and associated deltoid tear. Does the reverse shoulder arthroplasty and deltoid repair be a possible option of treatment?	Incorrect patient population (<10 patients/group)
Garofalo, R. 2005	Arthroscopic treatment of anterior shoulder instability using knotless suture anchors	Retrospective case series
Garret, J. 2017	Pyrocarbon interposition shoulder arthroplasty: preliminary results from a prospective multicenter study at 2 years of follow-up	not a diagnostic study
Gartsman, G. M. 2013	Ultrasound evaluation of arthroscopic full-thickness supraspinatus rotator cuff repair: single-row versus double-row suture bridge (transosseous equivalent) fixation. Results of a prospective, randomized study	follow up <12 months( average 10 months; range 6-12 months) *not best available
Gartsman, G. M. 2004	Arthroscopic rotator cuff repair with and without arthroscopic subacromial decompression: A	Duplicate study (same as AAOSID 4106)

Author	Article Title	Reason for Exclusion
	prospective, randomized study of one-year outcomes	
Gartsman, Gm 2013	Ultrasound evaluation of arthroscopic full-thickness supraspinatus rotator cuff repair: single-row versus double-row suture bridge (transosseous equivalent) fixation. Results of a prospective, randomized study	Duplicate study (same as AAOSID 1844)
Gasbarro, G. 2016	Morphologic Risk Factors in Predicting Symptomatic Structural Failure of Arthroscopic Rotator Cuff Repairs: Tear Size, Location, and Atrophy Matter	Not applicable to PICO 8; no relevant risk factors
Gebremariam, L. 2011	Effectiveness of surgical and postsurgical interventions for the subacromial impingement syndrome: A systematic review	systematic review
Gebremariam, L. 2014	Subacromial impingement syndrome--effectiveness of physiotherapy and manual therapy	Systematic review
Gee, E. C. 2015	Reverse Shoulder Arthroplasty in Rheumatoid Arthritis: A Systematic Review	Systematic Review
Gellhorn, A. C. 2015	Intense focused ultrasound stimulation of the rotator cuff: evaluation of the source of pain in rotator cuff tears and tendinopathy	No sensitivity/specificity, LR, or ROC curve values
Gerhardt, C. 2012	Arthroscopic single-row modified mason-allen repair versus double-row suture bridge reconstruction for supraspinatus tendon tears: a matched-pair analysis	*not best available
Gervasi, E. 2016	Fluoroscopy-guided biodegradable spacer implantation using local anesthesia: safety and efficacy study in patients with massive rotator cuff tears	less than 20 pts total; no comparison group
Getahun, T. Y. 2000	Concurrent validity of patient rating scales in assessment of outcome after rotator cuff repair	Does not address diagnostic question of interest
Gialanella, B. 2013	Corticosteroids injection in rotator cuff tears in elderly patient: pain outcome prediction	Not applicable to PICO 8; no primary RC surgery only injection
Gialanella, B. 2017	Functional Recovery After Rotator Cuff Repair: The Role of Biceps Surgery	Not best available evidence
Gialanella, B. 2018	Functional Recovery After Rotator Cuff Repair: The Role of Biceps Surgery	Not best available evidence
Gialanella, B. 2011	Effects of corticosteroids injection in rotator cuff tears	Not best available evidence
Gigante, A. 2013	Effect of subacromial injections of hyaluronan on different grades of rotator cuff lesion: A prospective study	all pts receive injection, no comparison

Author	Article Title	Reason for Exclusion
Gilat, R. 2018	Recurrent rotator cuff tear: Is ultrasound imaging reliable?	Not best available evidence
Gill, H. S. 2007	Physical examination for partial tears of the biceps tendon	*Not best available (moderate quality)
Gill, T. K. 2014	Prevalence of abnormalities on shoulder MRI in symptomatic and asymptomatic older adults	prevalence study; no diagnostic comparison
Gille, J. 2009	Deltoid muscular flap transfer for the treatment of irreparable rotator cuff tears	no comparison group
Gismervik, S. O. 2017	Physical examination tests of the shoulder: A systematic review and meta-analysis of diagnostic test performance	Systematic review
Gismervik, S. O. 2017	Physical examination tests of the shoulder: a systematic review and meta-analysis of diagnostic test performance	Meta-analysis
Gismervik, S. O. 2017	Physical examination tests of the shoulder: a systematic review and meta-analysis of diagnostic test performance	Meta-analysis
Godinho, G. G. 2010	Evaluation of Anatomical Integrity Using Ultrasound Examination, and Functional Integrity Using the Constant & Murley Score, of the Rotator Cuff Following Arthroscopic Repair	Not relevant to PICO's;
Goergen, S. K. 1996	Improving the diagnostic accuracy of MR in the detection of infraspinatus tendon injuries	*Not best available (low quality)
Gokalp, G. 2010	Efficacy of ultrasonography-guided shoulder MR arthrography using a posterior approach	no comparison to ref std
Goldberg, B. J. 1993	Arthroscopic transglenoid suture capsulolabral repairs: preliminary results	Case series
Goldberg, J. A. 2003	Role of community diagnostic ultrasound examination in the diagnosis of full-thickness rotator cuff tears	*Not best available (moderate quality)
Goldberg, J. A. 2003	Role of community diagnostic ultrasound examination in the diagnosis of full-thickness rotator cuff tears	*Not best available (moderate quality)
Goldgrub, R. 2016	The Effectiveness of Multimodal Care for the Management of Soft Tissue Injuries of the Shoulder: A Systematic Review by the Ontario Protocol for Traffic Injury Management (OPTIMA) Collaboration	Systematic review
Gombera, M. M. 2014	Erratum:Rotator Cuff Tear and Glenohumeral Instability: A Systematic Review[Clin Orthop Relat Res, (2014), 472, 2448-2456, DOI: 10.1007/s11999-013-3290-2]	Systematic review - NO FULL TEXT AVAILABLE

Author	Article Title	Reason for Exclusion
Gombera, M. M. 2014	Rotator cuff tear and glenohumeral instability : a systematic review	Systematic review
Gomes, J. L. E. 2012	Conventional rotator cuff repair complemented by the aid of mononuclear autologous stem cells	less than 20 pts total; no comparison group
Gotoh, M. 2013	The modified massive cuff stitch: functional and structural outcome in massive cuff tears	*not best available
Gottschalk, A. 2003	Continuous wound infiltration with ropivacaine reduces pain and analgesic requirement after shoulder surgery	Not best available evidence
Goupille, P. 1993	Diagnostic value of plain radiographs in rotator cuff tear	*Not best available (low quality)
Goupille, P. 1996	Local corticosteroid injections in the treatment of rotator cuff tendinitis (except for frozen shoulder and calcific tendinitis). Groupe Rhumatologique Francais de l'Epaule (G.R.E.P.)	Systematic review
Goutallier, D. 1995	Fatty infiltration of disrupted rotator cuff muscles	not a relevant study or review
Goutallier, D. 2006	Tension-free cuff repairs with excision of macroscopic tendon lesions and muscular advancement: results in a prospective series with limited fatty muscular degeneration	Case series
Grambart, S. T. 2015	Sports medicine and platelet-rich plasma: nonsurgical therapy	systematic review
Grant, H. J. 2004	Evaluation of interventions for rotator cuff pathology: a systematic review	Systematic review
Grant, J. A. 2013	Intra- and inter-rater reliability of the detection of tears of the supraspinatus central tendon on MRI by shoulder surgeons	Does not address diagnostic question of interest
Granviken, F. 2015	Home exercises and supervised exercises are similarly effective for people with subacromial impingement: a randomised trial	Incorrect patient population (no primary RC repair)
Grasso, R. F. 2013	Direct magnetic resonance (MR) shoulder arthrography: posterior approach under ultrasonographic guidance and abduction (PAUGA)	*Not best available (moderate quality)
Gratz, S. 1998	Arthroscintigraphy in suspected rotator cuff rupture	Very low quality
Grauer, J. D. 1992	Biceps tendon and superior labral injuries	Case series
Green, J. M. 2017	All-Arthroscopic Suprapectoral Versus Open Subpectoral Tenodesis of the Long Head of the Biceps Brachii Without the Use of Interference Screws	Very low quality
Green, J. M. 2017	All-Arthroscopic Suprapectoral Versus Open Subpectoral Tenodesis of the Long Head of the	Not best available evidence



Author	Article Title	Reason for Exclusion
	Biceps Brachii Without the Use of Interference Screws	
Green, L. B. 2003	Sources of variation in readmission rates, length of stay, and operative time associated with rotator cuff surgery	N/A
Green, S. 2005	Acupuncture for shoulder pain	Meta-analysis
Green, Sally 2005	Acupuncture for shoulder pain	systematic review
Grimberg, J. 2015	Arthroscopic-assisted latissimus dorsi tendon transfer for irreparable posterosuperior cuff tears	no diagnostic tool measured
Gross, C. E. 2012	Operative treatment of chondral defects in the glenohumeral joint	systematic review
Gruson, K. I. 2008	Subacromial corticosteroid injections	Background article
Guanche, C. A. 2003	Clinical testing for tears of the glenoid labrum	*Not best available (moderate quality)
Guggenberger, R. 2017	C-arm flat-panel CT arthrography of the shoulder: Radiation dose considerations and preliminary data on diagnostic performance	*Not best available (moderate quality)
Guity, M. R. 2015	Open Rotator Cuff Tear Repair Using Deltopectoral Approach	No Comparison group
Gulotta, L. V. 2011	Prospective evaluation of arthroscopic rotator cuff repairs at 5 years: Part II-prognostic factors for clinical and radiographic outcomes	Incorrect patient population (Not exclusive to full-thickness tears for prognostic patients)
Gulotta, L. V. 2011	Prospective evaluation of arthroscopic rotator cuff repairs at 5 years: Part I - Functional outcomes and radiographic healing rates	Incorrect patient population (Not exclusive to full-thickness tears for prognostic patients)
Gumina, S. 2008	A new test of resistance in the diagnosis of postero-superior rotator cuff tears	*Not best available (moderate quality)
Gumina, S. 2013	The impact of aging on rotator cuff tear size	Insufficient data
Gumina, S. 2017	Mobility recovery after arthroscopic rotator cuff repair	Not best available evidence
Guntern, D. V. 2003	Articular cartilage lesions of the glenohumeral joint: Diagnostic effectiveness of MR arthrography and prevalence in patients with subacromial impingement syndrome	*Not best available (moderate quality)
Guosheng, Y. 2017	The diagnostic value of a modified Neer test in identifying subacromial impingement syndrome	*Not best available (moderate quality)
Guosheng, Y. 2017	The diagnostic value of a modified Neer test in identifying subacromial impingement syndrome	Not best available evidence
Gupta, R. 2014	Curvelet based automatic segmentation of supraspinatus tendon from ultrasound image: a focused assistive diagnostic method	*Not best available (low quality)

Author	Article Title	Reason for Exclusion
Gusmer, P. B. 1996	Labral injuries: accuracy of detection with unenhanced MR imaging of the shoulder	*Not best available (moderate quality)
Gwak, H. C. 2015	Delaminated rotator cuff tear: extension of delamination and cuff integrity after arthroscopic rotator cuff repair	not a relevant study or review
Gwark, J. Y. 2018	Outcomes of Arthroscopic Rotator Cuff Repair in Patients Who Are 70 Years of Age or Older Versus Under 70 Years of Age: A Sex- and Tear Size-Matched Case-Control Study	Not best available evidence
Gwinner, C. 2016	Two-staged application of PRP in arthroscopic rotator cuff repair: a matched-pair analysis	*not best available
Haahr, J. P. 2005	Exercises versus arthroscopic decompression in patients with subacromial impingement: A randomised, controlled study in 90 cases with a one year follow up	pts have SIS, not tears
Habernek, H. 1993	A new approach to the subacromial space. Technique and 2-year results in 28 rotator-cuff repair cases	not a relevant study or review
Hadzic, A 2005	For outpatient rotator cuff surgery, nerve block anesthesia provides superior same-day recovery over general anesthesia	repeat of AAOS ID 3982
Hahn, S. 2017	Magnetic resonance arthrography results that indicate surgical treatment for partial articular-sided supraspinatus tendon avulsion: a retrospective study in a tertiary center	pts have partial avulsions, not full thickness tears
Hak, A. 2015	A Double-Blinded Placebo Randomized Controlled Trial Evaluating Short-term Efficacy of Platelet-Rich Plasma in Reducing Postoperative Pain After Arthroscopic Rotator Cuff Repair: A Pilot Study	Not best available evidence
Halma, J. J. 2012	Interdisciplinary inter-observer agreement and accuracy of MR imaging of the shoulder with arthroscopic correlation	*Not best available (moderate quality)
Hamada, K. 2011	A radiographic classification of massive rotator cuff tear arthritis	Very low quality
Hamie, M. 2017	Rotator cuff tear: Comparative study of clinical outcomes in elderly and young populations after arthroscopic repair	same risks factors assessed in a high quality study
Han, S. S. 2013	Randomized, controlled trial of multimodal shoulder injection or intravenous patient-controlled analgesia after arthroscopic rotator cuff repair	Duplicate study (same as AAOSID 12612)

Author	Article Title	Reason for Exclusion
Hanchard, N. C. 2013	Physical tests for shoulder impingements and local lesions of bursa, tendon or labrum that may accompany impingement	Systematic review
Hanchard, N. C. A. 2013	Physical tests for shoulder impingements and local lesions of bursa, tendon or labrum that may accompany impingement	Systematic review
Haneveld, H. 2013	Arthroscopic double-row repair of the rotator cuff: a comparison of bio-absorbable and non-resorbable anchors regarding osseous reaction	*not best available
Hanratty, C. E. 2012	The effectiveness of physiotherapy exercises in subacromial impingement syndrome: a systematic review and meta-analysis	Systematic review & meta-analysis
Hao, T. D. 2017	Surgical technique and early outcomes of intramedullary nailing of displaced proximal humeral fractures in an Asian population using a contemporary straight nail design	pts do not have full-thickness tears
Harniman, E. 2004	Extracorporeal shock wave therapy for calcific and noncalcific tendonitis of the rotator cuff: A systematic review	Systematic review
Harris, J. D. 2011	Systematic review of the surgical treatment for symptomatic os acromiale	Systematic review
Hart, D. 2015	Serious shoulder injuries in professional soccer: return to participation after surgery	not a relevant study or review
Hartrick, C. T. 2012	The effect of initial local anesthetic dose with continuous interscalene analgesia on postoperative pain and diaphragmatic function in patients undergoing arthroscopic shoulder surgery: a double-blind, randomized controlled trial	repeat of AAOS ID 12899
Hartzler, R. U. 2013	Clinical and radiographic factors influencing the results of revision rotator cuff repair	no comparison group
Hartzler, R. U. 2015	Reverse shoulder arthroplasty for massive rotator cuff tear: risk factors for poor functional improvement	Not applicable to PICO 10; prognostic study; low quality for pico 10
Harvey, G. P. 2004	Patient-Controlled Ropivacaine Analgesia after Arthroscopic Subacromial Decompression	Not best available evidence
Hashiguchi, H. 2018	Clinical outcomes and structural integrity of arthroscopic double-row versus suture-bridge repair for rotator cuff tears	Not best available evidence
Hassanien, O. A. 2016	Reliable MRI and MRN signs of nerve and muscle injury following trauma to the shoulder with EMG and Clinical correlation	Not relevant to PICOs;

Author	Article Title	Reason for Exclusion
Hata, Y. 2001	A less invasive surgery for rotator cuff tear: mini-open repair	*not best available
Hauser, R. A. 2016	A Systematic Review of Dextrose Prolotherapy for Chronic Musculoskeletal Pain	Systematic review
Haviv, B. 2010	Arthroscopic rotator cuff repair: clinical outcome of 607 patients	no risk factors studied, no comparison technique for PICO 9
Hawk, C. 2017	Systematic Review of Nondrug, Nonsurgical Treatment of Shoulder Conditions	systematic review
Hawkes, D. H. 2015	Electromyographic assessment of muscle fatigue in massive rotator cuff tear	all pts with tears, study assesses fatigue
Hearnden, A. 2008	The cost of shoulder arthroscopy: a comparison with national tariff	Not relevant to PICOs;
Hegedus, E. J. 2010	Vascularity and tendon pathology in the rotator cuff: a review of literature and implications for rehabilitation and surgery	Systematic review
Hegedus, E. J. 2012	Which physical examination tests provide clinicians with the most value when examining the shoulder? Update of a systematic review with meta-analysis of individual tests	Systematic Review
Hegedus, E. J. 2008	Physical examination tests of the shoulder: a systematic review with meta-analysis of individual tests	Systematic review
Hegedus, E. J. 2008	Physical examination tests of the shoulder: A systematic review with meta-analysis of individual tests	Meta-analysis
Hein, J. 2015	Retear Rates After Arthroscopic Single-Row, Double-Row, and Suture Bridge Rotator Cuff Repair at a Minimum of 1 Year of Imaging Follow-up: A Systematic Review	Systematic review
Helfen, T. 2018	Concomitant glenohumeral injuries in Neer type II distal clavicle fractures	Incorrect patient population (not exclusive to full-thickness tears)
Henderson, R. E. A. 2015	The accuracy of diagnostic ultrasound imaging for musculoskeletal soft tissue pathology of the extremities: A comprehensive review of the literature	Systematic review
Henkus, H. E. 2006	The accuracy of subacromial injections: A prospective randomized magnetic resonance imaging study	Imperfect comparator

Author	Article Title	Reason for Exclusion
Henkus, H. E. 2009	Bursectomy compared with acromioplasty in the management of subacromial impingement syndrome: a prospective randomised study	excluded RC tears
Henkus, He 2006	The accuracy of subacromial injections: a prospective randomized magnetic resonance imaging study	less than 10 tears
Henkus, He 2009	Bursectomy compared with acromioplasty in the management of subacromial impingement syndrome: a prospective randomised study	does not fit PICO 7; patients diagnosed with SIS
Henn, Iii R. F. 2008	Patients with workers' compensation claims have worse outcomes after rotator cuff repair	Wrong article
Henn, Iii R. F. 2007	Patients' preoperative expectations predict the outcome of rotator cuff repair	Duplicate study (same as AAOSID 3540)
Henn, R. F., 3rd 2008	Patients with workers' compensation claims have worse outcomes after rotator cuff repair	same as AAOS ID 9642
Henry, P. 2015	Arthroscopic Repair for Chronic Massive Rotator Cuff Tears: A Systematic Review	Systematic review
Henseler, J. F. 2015	The minimal detectable change of the Constant score in impingement, full-thickness tears, and massive rotator cuff tears	No sensitivity/specificity, LR, or ROC curve values
Hermanowicz, K. 2018	Long Head Biceps Tendon??Natural Patch for Massive Irreparable Rotator Cuff Tears	Natural history
Hermans, J. 2013	Does this patient with shoulder pain have rotator cuff disease?: The Rational Clinical Examination systematic review	systematic review
Hermans, J. 2013	Does this patient with shoulder pain have rotator cuff disease? The rational clinical examination systematic review	Systematic review
Hermoso, F. E. 2009	Shoulder pain in the elderly	Background article
Heron, S. R. 2017	Comparison of three types of exercise in the treatment of rotator cuff tendinopathy/shoulder impingement syndrome: A randomized controlled trial	pts did not undergo RC repair
Heuberger, P. R. 2016	Arthroscopic management of massive rotator cuff tears: an evaluation of debridement, complete, and partial repair with and without force couple restoration	Not Applicable to PICO 10; statistical analysis encompasses 3 study groups in which only 2 groups are applicable
Heuberger, P. R. 2016	Arthroscopic management of massive rotator cuff tears: an evaluation of debridement, complete, and	Duplicate study (same as AAOSID 5562)

Author	Article Title	Reason for Exclusion
	partial repair with and without force couple restoration	
Heyer, J. H. 2018	Identifiable risk factors for thirty-day complications following arthroscopic rotator cuff repair	Not applicable to PICO 8; under 1 year follow-u[
Hintermann, B. 1994	Theo van Rens Prize. Arthroscopic assessment of the unstable shoulder	not a relevant study or review
Hitachi, S. 2011	High-resolution magnetic resonance imaging of rotator cuff tears using a microscopy coil: noninvasive detection without intraarticular contrast material	*Not best available (moderate quality)
Ho, C. Y. C. 2009	The effectiveness of manual therapy in the management of musculoskeletal disorders of the shoulder: A systematic review	Systematic review
Ho, W. P. 2013	One-stage arthroscopic repair of rotator cuff tears with shoulder stiffness	concomitant vs. concomitant
Hodler, J. 1992	Rotator cuff disease: assessment with MR arthrography versus standard MR imaging in 36 patients with arthroscopic confirmation	*Not best available (moderate quality)
Hodler, J. 1991	MRI and sonography of the shoulder	*Not best available (low quality)
Hoggatt, J. 2011	Hot ortho-biologic topics at AAOS 2011+: platelet-rich plasma and related growth factors generate excitement	Narrative review
Hollister, M. S. 1995	Association of sonographically detected subacromial/subdeltoid bursal effusion and intraarticular fluid with rotator cuff tear	*Not best available (low quality)
Hollman, F 2017	Abduction Brace Versus Antirotation Sling After Arthroscopic Cuff Repair: the Effects on Pain and Function	Duplicate study (same as AAOSID 50)
Hollman, F. 2017	Abduction Brace Versus Antirotation Sling After Arthroscopic Cuff Repair: The Effects on Pain and Function	Not best available evidence
Hollman, F. 2017	Abduction Brace Versus Antirotation Sling After Arthroscopic Cuff Repair: The Effects on Pain and Function	Not best available evidence
Holmgren, T. 2012	Supervised strengthening exercises versus home-based movement exercises after arthroscopic acromioplasty: a randomized clinical trial	Duplicate study (same as AAOSID 2469)
Holtby, R. 2016	Impact of Platelet-Rich Plasma on Arthroscopic Repair of Small- to Medium-Sized Rotator Cuff Tears: A Randomized Controlled Trial	PTTs and FTTs included, no stratification of results

Author	Article Title	Reason for Exclusion
Holtby, R. 2014	Relationship between clinical and surgical findings and reparability of large and massive rotator cuff tears: a longitudinal study	no qualifying risk factors measured
Holtby, R. 2004	Accuracy of the Speed's and Yergason's tests in detecting biceps pathology and SLAP lesions: comparison with arthroscopic findings	not RC tear
Honda, H. 2015	Clinical application of radial magnetic resonance imaging for evaluation of rotator cuff tear	No sensitivity/specificity, LR, or ROC curve values
Hong, Ep 2016	The effect of preemptive intravenous ketamine on postoperative pain in patients undergoing arthroscopic rotator cuff repair with intra articular ropivacaine injection	injection of ketamine given pre-op, not PICO 12, no ancillary surgery (no PICO 9)
Horii, M. 1998	The diagnostic usefulness of magnetic resonance imaging for a partial- thickness rotator cuff tear	Incorrect patient population
Horneff, J. G., 3rd 2017	Long-term Correction in Sleep Disturbance Is Sustained After Arthroscopic Rotator Cuff Repair	Not relevant to PICOs; narcotics on sleep quality
Horner, N. S. 2016	Indications and outcomes of shoulder arthroscopy after shoulder arthroplasty	Systematic review
Hottya, G. A. 1998	Tear of the posterior shoulder stabilizers after posterior dislocation: MR imaging and MR arthrographic findings with arthroscopic correlation	only 4 patients
Houck, D. A. 2017	Early Versus Delayed Motion After Rotator Cuff Repair	Systematic review
Houck, D. A. 2017	Early Versus Delayed Motion After Rotator Cuff Repair: A Systematic Review of Overlapping Meta-analyses	Systematic review
Hsu, J. 2015	Natural History of Rotator Cuff Disease and Implications on Management	Natural History
Hsu, J. C. 2017	Efficiency of quantitative echogenicity for investigating supraspinatus tendinopathy by the gray-level histogram of two ultrasound devices	No sensitivity/specificity, LR, or ROC curve values
Hsu, J. E. 2017	Treatment of irreparable cuff tears with smoothing of the humeroscapular motion interface without acromioplasty	no comparison group
Hsu, K. H. 2018	Comparing the coracoclavicular loop technique with a hook plate for the treatment of distal clavicle fractures	Incorrect patient population
Hsu, S. L. 2007	Surgical results in rotator cuff tears in shoulder stiffness	not a relevant study or review
Huang, C. C. 2006	Imaging factors related to rotator cuff tear in patients with deltoid contracture	same risks factors assessed in a high quality study

Author	Article Title	Reason for Exclusion
Huang, H. 2015	A Systematic Review of the Psychometric Properties of Patient-Reported Outcome Instruments for Use in Patients With Rotator Cuff Disease	WRONG PDF
Huang, R. 2016	Systematic Review of All-Arthroscopic Versus Mini-Open Repair of Rotator Cuff Tears: A Meta-Analysis	Systematic Review
Huang, S. W. 2016	Diabetes mellitus increases the risk of rotator cuff tear repair surgery: A population-based cohort study	Does not address prognostic question of interest
Huang, S. W. 2017	Gout Can Increase the Risk of Receiving Rotator Cuff Tear Repair Surgery	Does not address prognostic question of interest
Huberty, D. P. 2009	Incidence and treatment of postoperative stiffness following arthroscopic rotator cuff repair	Incorrect patient population (Not exclusive to full-thickness tears for prognostic patients)
Hughes, J. D. 2017	Infection rates in arthroscopic versus open rotator cuff repair	Not best available evidence
Hughes, P. C. 2008	Most clinical tests cannot accurately diagnose rotator cuff pathology: a systematic review	Systematic review
Huijsmans, P. E. 2007	Arthroscopic rotator cuff repair with double-row fixation	no comparison group
Huisstede, B. M. 2011	Evidence for effectiveness of Extracorporeal Shock-Wave Therapy (ESWT) to treat calcific and non-calcific rotator cuff tendinosis--a systematic review	Systematic review
Huisstede, B. M. 2011	Current evidence for effectiveness of interventions to treat rotator cuff tears	Systematic review
Huisstede, B. M. A. 2011	Evidence for effectiveness of Extracorporeal Shock-Wave Therapy (ESWT) to treat calcific and non-calcific rotator cuff tendinosis - A systematic review	Systematic review
Huisstede, B. M. A. 2011	Current evidence for effectiveness of interventions to treat rotator cuff tears	Systematic review
Hultenheim Klintberg, I. 2008	Early activation or a more protective regime after arthroscopic subacromial decompression--a description of clinical changes with two different physiotherapy treatment protocols--a prospective, randomized pilot study with a two-year follow-up	Not best available evidence
Hultenheim Klintberg, I. 2008	Early activation or a more protective regime after arthroscopic subacromial decompression - A description of clinical changes with two different physiotherapy treatment protocols - A prospective, randomized pilot study with a two-year follow-up	Imperfect comparison group (both groups had PT sessions)
Hurley, J. A. 1992	Posterior shoulder instability. Surgical versus conservative results with evaluation of glenoid version	*not best available



Author	Article Title	Reason for Exclusion
Hurwit, D. J. 2017	A comparative analysis of work-related outcomes after humeral hemiarthroplasty and reverse total shoulder arthroplasty	Not applicable to PICO 10; pts w/ arthropathy
Huylebroek, J. 1991	Correlation of computed arthrotomography with arthroscopy of the glenohumeral joint	*Not best available (moderate quality)
Hwang, J. T. 2016	Which Is Better for Arthroscopic Tenodesis of the Long Head of the Biceps: Soft Tissue or Bony Interference Fixation?	N/A
Hyun, A. K. 2007	Ultrasonographic findings of the shoulder in patients with rheumatoid arthritis and comparison with physical examination	*Not best available (moderate quality)
Hyvonen, P. 2001	Supraspinatus outlet view in the diagnosis of stages II and III impingement syndrome.[Erratum appears in Acta Radiol 2001 Nov;42(6):624]	*Not best available (moderate quality)
Iagulli, N. D. 2012	Comparison of partial versus complete arthroscopic repair of massive rotator cuff tears	Not applicable to PICO 10; imperfect comparison
Iannotti, J. P. 1996	Postoperative assessment of shoulder function: a prospective study of full-thickness rotator cuff tears	Not applicable to PICO 8; no relevant risk factors
Iannotti, J. P. 2006	Porcine small intestine submucosa augmentation of surgical repair of chronic two-tendon rotator cuff tears. A randomized, controlled trial	Duplicate study (same as AAOSID 12462)
Iannotti, J. P. 1991	Magnetic resonance imaging of the shoulder. Sensitivity, specificity, and predictive value	*Not best available (low quality)
Iannotti, Jp 2013	Time to failure after rotator cuff repair: A prospective imaging study	Does not address diagnostic question of interest
Ide, J. 2015	Functional and structural comparisons of the arthroscopic knotless double-row suture bridge and single-row repair for anterosuperior rotator cuff tears	*not best available
Ide, J. 2005	A comparison of arthroscopic and open rotator cuff repair	*not best available
Ide, J. 2005	Sports activity after arthroscopic superior labral repair using suture anchors in overhead-throwing athletes	study excluded full-thickness tears
Ikemoto, R. Y. 2012	Arthroscopic Repair of Small and Medium Tears of the Supraspinatus Muscle Tendon: Evaluation of the Clinical and Functional Outcomes after Two Years of Follow-Up	no comparison group
Ikemoto, R. Y. 2012	Tenotomy with or without Tenodesis of the Long Head of the Biceps Using Repair of the Rotator Cuff	Not best available evidence
Im, G. I. 2017	Clinical use of stem cells in orthopaedics	Natural history

Author	Article Title	Reason for Exclusion
Imhoff, A. B. 1996	Correlation of MR imaging, CT arthrography, and arthroscopy of the shoulder	Incorrect patient population
Inderhaug, E. 2015	Preoperative NSAIDs, non-acute onset and long-standing symptoms predict inferior outcome at long-term follow-up after rotator cuff repair	Same as AAOSID 13068
Inderhaug, E. 2017	Preoperative NSAIDs, non-acute onset and long-standing symptoms predict inferior outcome at long-term follow-up after rotator cuff repair	Not applicable to PICO 8; no multivariate analysis
Innocenti, M. 1999	Arthroscopic treatment of non-calcific rotator cuff tendinitis	Incorrect patient population (<10 patients/comparative group)
Ioppolo, F. 2012	Extracorporeal shock-wave therapy for supraspinatus calcifying tendinitis: a randomized clinical trial comparing two different energy levels	*not best available
Iossifidis, A. 2015	Ultrasound for the detection of full-thickness rotator cuff tears: the learning curve for an orthopaedic surgeon using a novel training method	*Not best available (moderate quality)
Isaac, C. 2012	Biologic approaches to enhance rotator cuff healing after injury	Systematic review
Itoi, E. 2016	Surgical repair did not improve functional outcomes more than conservative treatment for degenerative rotator cuff tears	Poster presentation
Itoi, E. 1999	Which is more useful, the "full can test" or the "empty can test," in detecting the torn supraspinatus tendon?	*Not best available (moderate quality)
Itoi, E. 2006	Are pain location and physical examinations useful in locating a tear site of the rotator cuff?	*Not best available (low quality)
Itokazu, M. 1995	Clinical evaluation of high-molecular-weight sodium hyaluronate for the treatment of patients with periarthritis of the shoulder	no comparison group
Iyengar, J. J. 2011	Magnetic resonance imaging tendon integrity assessment after arthroscopic partial-thickness rotator cuff repair	not a relevant study or review
Izadpanah, K. 2014	Preoperative planning of calcium deposit removal in calcifying tendinitis of the rotator cuff - possible contribution of computed tomography, ultrasound and conventional X-Ray	Diagnosis of calcifying tendinitis not RC tear
Izquierdo, R. 2010	Treatment of glenohumeral osteoarthritis	Guideline
Jacobson, M. E. 2012	Open capsular shift and arthroscopic capsular plication for treatment of multidirectional instability	Systematic review

Author	Article Title	Reason for Exclusion
Jacquot, A. 2014	Is rotator cuff repair appropriate in patients older than 60 years of age? Prospective, randomised trial in 103 patients with a mean four-year follow-up	Imperfect comparison group
Jacquot, A. 2014	Is rotator cuff repair appropriate in patients older than 60 years of age? prospective, randomised trial in 103 patients with a mean four-year follow-up	both groups have concomitant treatment
Jain, N. B. 2017	The Diagnostic Accuracy of Special Tests for Rotator Cuff Tear: The ROW Cohort Study	*Not best available (moderate quality)
Jain, N. B. 2017	The Diagnostic Accuracy of Special Tests for Rotator Cuff Tear: The ROW Cohort Study	Not best available evidence
Jain, N. B. 2005	Influence of provider volume on length of stay, operating room time, and discharge status for rotator cuff repair	risk factors not relevant
James Davidson, J. F. 2005	Use of preoperative magnetic resonance imaging to predict rotator cuff tear pattern and method of repair	*Not best available (low quality)
Januario, L. B. 2016	Effects of active pause pattern of surface electromyographic activity among subjects performing monotonous tasks: A systematic review	systematic review
Jarrett, C. D. 2011	Arthroscopic treatment of rotator cuff disease	not a study
Jauregui, J. J. 2017	Characteristics of rheumatoid arthritis patients undergoing reverse shoulder arthroplasty	Incorrect patient population amongst prognostic (arthropathy)
Jellad, A. 2012	Isolated greater tuberosity fracture: Short-term functional outcome following a specific rehabilitation program	Retrospective case series
Jensen, A. R. 2017	Evaluation of the trends, concomitant procedures, and complications with open and arthroscopic rotator cuff repairs in the medicare population	Not best available evidence
Jeong, J. Y. 2017	Effect of sodium hyaluronate/carboxymethyl cellulose (Guardix-sol) on retear rate and postoperative stiffness in arthroscopic rotator cuff repair patients: A prospective cohort study	Not best available evidence
Jeong, J. Y. 2018	Arthroscopic Incomplete Repair Using a Hybrid Technique for Large to Massive Rotator Cuff Tears: Clinical Results and Structural Integrity	Not best available evidence
Ji, J. H. 2010	Clinical outcomes of arthroscopic single and double row repair in full thickness rotator cuff tears	*not best available
Ji, X. 2015	Arthroscopic versus mini-open rotator cuff repair: an up-to-date meta-analysis of randomized controlled trials	Meta-analysis

Author	Article Title	Reason for Exclusion
Jo, C. H. 2011	Does platelet-rich plasma accelerate recovery after rotator cuff repair? A prospective cohort study	*not best available
Jo, C. H. 2013	Cross-sectional area of the supraspinatus muscle after rotator cuff repair: an anatomic measure of outcome	Does not address prognostic question of interest
Jo, C. H. 2014	Multimodal analgesia for arthroscopic rotator cuff repair: a randomized, placebo-controlled, double-blind trial	Duplicate to AAOSID 12577
Jo, C. H. 2013	Platelet-rich plasma for arthroscopic repair of large to massive rotator cuff tears: a randomized, single-blind, parallel-group trial	*not best available
Jo, C. H. 2013	Multiple channeling improves the structural integrity of rotator cuff repair	no concomitant repair
Jo, C. H. 2016	Corrigendum. Platelet-rich plasma for arthroscopic repair of medium to large rotator cuff tears: a randomized controlled trial.[Erratum for Am J Sports Med. 2015 Sep;43(9):2102-10; PMID: 26015443]	Corrigendum
Jo, C. H. 2015	Platelet-rich plasma for arthroscopic repair of medium to large rotator cuff tears: a randomized controlled trial	*not best available
Jobin, C. M. 2012	Reverse total shoulder arthroplasty for cuff tear arthropathy: the clinical effect of deltoid lengthening and center of rotation medialization	pts included have RC arthropathy
Johanson, N. A. 2011	Surgical treatment options in patients with impaired bone quality	Systematic review
Johansson, K. 2002	A combination of systematic review and clinicians' beliefs in interventions for subacromial pain	Systematic review
Johansson, K. 2011	Subacromial corticosteroid injection or acupuncture with home exercises when treating patients with subacromial impingement in primary care-a randomized clinical trial	pts w/previous surgery on affected side excluded
Jordan, L. K. 2002	Relationship between MRI and clinical findings in the acromioclavicular joint	*Not best available (moderate quality)
Jordan, R. W. 2015	A comparison of magnetic resonance arthrography and arthroscopic findings in the assessment of anterior shoulder dislocations	*Not best available (moderate quality)
Jost, B. 2000	Clinical outcome after structural failure of rotator cuff repairs	following patients after surgery; no comparison group
Jost, B. 2005	MRI findings in throwing shoulders: Abnormalities in professional handball players	Does not address diagnostic question of interest

Author	Article Title	Reason for Exclusion
Jowett, S. 2013	Cost-effectiveness of exercise therapy after corticosteroid injection for moderate to severe shoulder pain due to subacromial impingement syndrome: A trial-based analysis	cost-effective analysis
Jung, J. Y. 2017	Diagnostic Performance of MR Arthrography with Anterior Trans-Subscapularis versus Posterior Injection Approach for Subscapularis Tendon Tears at 3.0T	*Not best available (low quality)
Jung, J. Y. 2010	Magnetic resonance arthrography including ABER view in diagnosing partial-thickness tears of the rotator cuff: accuracy, and inter- and intra-observer agreements	*Not best available (low quality)
Jung, J. Y. 2006	Adhesive capsulitis of the shoulder: Evaluation with MR arthrography	diagnosing frozen shoulder, not RC tear
Jung, J. Y. 2012	Supraspinatus tendon tears at 3.0 T shoulder MR arthrography: diagnosis with 3D isotropic turbo spin-echo SPACE sequence versus 2D conventional sequences	*Not best available (moderate quality)
Jung, J. Y. 2013	SLAP tears: Diagnosis using 3-T shoulder MR arthrography with the 3D isotropic turbo spin-echo space sequence versus conventional 2D sequences	*Not best available (moderate quality)
Jung, J. Y. 2009	Comparison study of indirect MR arthrography and direct MR arthrography of the shoulder	Incorrect patient population
Junior, S. C. 2010	OUTCOME OF ROTATOR CUFF REPAIR IN SNYDER TYPE C1 AND C2 LESIONS, CONSIDERING SMOKERS AND NONSMOKERS	same risks factors assessed in a high quality study
Juul-Kristensen, B. 2000	Comparison of muscle sizes and moment arms of two rotator cuff muscles measured by Ultrasonography and Magnetic Resonance Imaging	no tears to study
Kadum, B. 2015	Radiologic assessment of glenohumeral relationship: reliability and reproducibility of lateral humeral offset	not a relevant study or review
Kai, Y. 2015	Electromyographic study of rotator cuff muscle activity during full and empty can tests	12 patients total for both groups
Kamal, R. N. 2016	Quality measures in upper limb surgery	WRONG PDF-systematic review
Kamioka, H. 2011	A systematic review of nonrandomized controlled trials on the curative effects of aquatic exercise	Systematic Review
Kanatlı, U. 2017	Arthroscopic-Assisted Latissimus Dorsi Tendon Transfer for Massive, Irreparable Rotator Cuff Tears: Technique and Short-Term Follow-Up of Patients With Pseudoparalysis	Incorrect patient population

Author	Article Title	Reason for Exclusion
Kanatli, U 2011	Arthroscopic repair of type II superior labrum anterior posterior (SLAP) lesions in patients over the age of 45 years: A prospective study	Not best available evidence
Kaneko, K. 1994	MR evaluation of rotator cuff impingement: correlation with confirmed full-thickness rotator cuff tears	not diagnostic, measures correlation of SAS and RCT
Kang, C. H. 2009	Supraspinatus tendon tears: Comparison of 3D US and MR arthrography with surgical correlation	*Not best available (moderate quality)
Kang, J. I. 2016	The effect of exercise types for rotator cuff repair patients on activities of shoulder muscles and upper limb disability	Not relevant to PICO's;
Kang, M. N. 2008	The accuracy of subacromial corticosteroid injections: A comparison of multiple methods	Not best available evidence
Kang, Y. 2017	Instability of the long head of the biceps tendon in patients with rotator cuff tear: evaluation on magnetic resonance arthrography of the shoulder with arthroscopic correlation	Not best available evidence
Kany, J. 2013	Rotator cuff tear imaging in patients over 70years: Specific MRI findings?	No sensitivity/specificity, LR, or ROC curve values
Kaplan, L. D. 2004	Internal impingement: findings on magnetic resonance imaging and arthroscopic evaluation	*Not best available (moderate quality)
Karthikeyan, S. 2010	A double-blind randomised controlled study comparing subacromial injection of tenoxicam or methylprednisolone in patients with subacromial impingement	same as A12708
Kartus, J. 2006	Long-term clinical and ultrasound evaluation after arthroscopic acromioplasty in patients with partial rotator cuff tears	Very low quality
Kasten, P. 2011	Prospective randomised comparison of arthroscopic versus mini-open rotator cuff repair of the supraspinatus tendon	*not best available
Katthagen, J. C. 2017	Improved outcomes with arthroscopic repair of partial-thickness rotator cuff tears: a systematic review	Systematic review
Kaya, E. 2011	Kinesio taping compared to physical therapy modalities for the treatment of shoulder impingement syndrome	Not best available evidence
Keener, J. D. 2014	Rehabilitation following arthroscopic rotator cuff repair: a prospective randomized trial of immobilization compared with early motion	same as A12558

Author	Article Title	Reason for Exclusion
Kelly, S. M. 2010	Clinical outcomes of exercise in the management of subacromial impingement syndrome: a systematic review	Systematic review
Kemp, K. A. 2011	Systematic review of rotator cuff tears in workers' compensation patients	Systematic Review
Kemp, K. A. R. 2011	Systematic review of rotator cuff tears in workers' compensation patients	Systematic Review - WRONG PDF
Kennedy, J. S. 2017	The validity and reliability of ultrasound on identifying supraspinatus tears during passive external rotation from 0degree to 30degree: a pilot project	*Not best available (low quality)
Keshavarz, R. 2017	The role of scapular kinematics in patients with different shoulder musculoskeletal disorders: A systematic review approach	Systematic review
Kesikburun, S. 2013	Platelet-rich plasma injections in the treatment of chronic rotator cuff tendinopathy: a randomized controlled trial with 1-year follow-up	same as A12688
Kessler, K. J. 1994	Complete isolated axillary nerve palsy in college and professional football players: A report of six cases	only 6 patients
Ketola, S. 2016	No difference in long-term development of rotator cuff rupture and muscle volumes in impingement patients with or without decompression: A randomized MRI study of 140 patients	not all pts w/FTT, results not stratified
Ketola, S. 2016	No difference in long-term development of rotator cuff rupture and muscle volumes in impingement patients with or without decompression	no full thickness rotator cuff tear; not applicable to any PICOs
Ketola, S. 2016	No difference in long-term development of rotator cuff rupture and muscle volumes in impingement patients with or without decompression: A randomized MRI study of 140 patients	no full thickness RCT
Ketola, S. 2015	Which patients do not recover from shoulder impingement syndrome, either with operative treatment or with nonoperative treatment?	Not relevant to PICOs;
Khair, M. M. 2016	A Systematic Review of Preoperative Fatty Infiltration and Rotator Cuff Outcomes	Systematic review
Khallaf, S. F. 2018	Efficacy of ultrasonography-guided intra-articular steroid injection of the shoulder and exercising in patients with adhesive capsulitis: Glenohumeral versus subacromial approaches	Not best available evidence
Khan, M. 2015	Cochrane in CORR Â: Platelet-rich Therapies for Musculoskeletal Soft Tissue Injuries (Review)	Narrative review

Author	Article Title	Reason for Exclusion
Khan, M. 2014	Cochrane in CORR Â®: Surgery for Rotator Cuff Disease (Review)	Systematic review
Khan, M. 2014	Cochrane in CORR: surgery for rotator cuff disease (review)	systematic review
Khan, W. S. 2011	A systematic review of the reverse shoulder replacement in rotator cuff arthropathy, rotator cuff tears, and rheumatoid arthritis	Systematic Review
Khashan, M. 2016	Effect of preemptive intra-articular morphine and ketamine on pain after arthroscopic rotator cuff repair: a prospective, double-blind, randomized controlled study	Imperfect comparison group (comparing narcotic to narcotic)
Khashan, M. 2016	Effect of preemptive intra-articular morphine and ketamine on pain after arthroscopic rotator cuff repair: a prospective, double-blind, randomized controlled study	Duplicate study (same as AAOSID 1091)
Khedr, Sa 2013	Comparative study of direct MR arthrography and CT arthrography with arthroscopic correlation in preoperative evaluation of anterior shoulder instability	no tear assessment
Khoury, V. 2008	Atrophy and fatty infiltration of the supraspinatus muscle: Sonography versus MRI	<10 FTT
Kibler, W. B. 1995	Specificity and sensitivity of the anterior slide test in throwing athletes with superior glenoid labral tears	*Not best available (low quality)
Kibler, Wb 2006	Evaluation of apparent and absolute supraspinatus strength in patients with shoulder injury using the scapular retraction test	no primary RCR; non-op vs. non-op
Kiet, T. K. 2015	Outcomes after shoulder replacement: comparison between reverse and anatomic total shoulder arthroplasty	Patient population not among applicable PICO-treatment combinations
Kim, C. W. 2017	The comparison of outcomes between delaminated and nondelaminated rotator cuff tear repair: is delamination a negative prognostic factor?	not a diagnostic study
Kim, C. W. 2014	The factors affecting pain pattern after arthroscopic rotator cuff repair	No statistical difference b/t PICO listed factors
Kim, H. A. 2007	Ultrasonographic findings of the shoulder in patients with rheumatoid arthritis and comparison with physical examination	all groups with RC tear have less than 10 pts
Kim, H. A. 2007	Ultrasonographic findings of painful shoulders and correlation between physical examination and ultrasonographic rotator cuff tear	*Not best available (moderate quality)



Author	Article Title	Reason for Exclusion
Kim, H. M. 2014	Factors affecting satisfaction and shoulder function in patients with a recurrent rotator cuff tear	Duplicate to AAOSID 7047
Kim, I. B. 2018	Prediction of the Irreparability of Rotator Cuff Tears	same risks factors assessed in a high quality study
Kim, I. B. 2016	Risk Factors for Retear After Arthroscopic Repair of Full-Thickness Rotator Cuff Tears Using the Suture Bridge Technique: Classification System	Same as AAOSID 415
Kim, J. H. 2018	Interscalene brachial plexus bolus block versus patient-controlled interscalene indwelling catheter analgesia for the first 48 hours after arthroscopic rotator cuff repair	Not best available evidence
Kim, J. W. 2016	The effect of combined exercise with slings and a flexi-bar on muscle activity and pain in rotator cuff repair patients	No follow up
Kim, J. Y. 2017	Can Preoperative Magnetic Resonance Imaging Predict the Reparability of Massive Rotator Cuff Tears?	Not best available evidence
Kim, J. Y. 2016	Analgesic efficacy of two interscalene blocks and one cervical epidural block in arthroscopic rotator cuff repair	Duplicate study (same as AAOSID 12499)
Kim, J. Y. 2017	Comparison of clinical efficacy among remifentanyl, nicardipine, and remifentanyl plus nicardipine continuous infusion for hypotensive anesthesia during arthroscopic shoulder surgery	Not best available evidence
Kim, Jy 2012	Extracorporeal shock wave therapy is not useful after arthroscopic rotator cuff repair	Imperfect comparator (not among listed interventions)
Kim, K. C. 2015	Anteroposterior translation of the glenohumeral joint in various pathologies: differences between shoulder MRI in the adducted neutral rotation and abducted externally rotated positions	not a relevant study or review
Kim, K. C. 2013	Comparison of repair integrity and functional outcomes for 3 arthroscopic suture bridge rotator cuff repair techniques	*not best available
Kim, K. C. 2014	Comparisons of retear patterns for 3 arthroscopic rotator cuff repair methods	*not best available
Kim, K. C. 2012	Repair integrity and functional outcome after arthroscopic rotator cuff repair: double-row versus suture-bridge technique	*not best available
Kim, K. H. 2017	The effect of intra-articular hyaluronate and tramadol injection on patients with adhesive capsulitis of the shoulder	Not best available evidence

Author	Article Title	Reason for Exclusion
Kim, K. H. 2017	The effect of intra-articular hyaluronate and tramadol injection on patients with adhesive capsulitis of the shoulder	Duplicate to AAOSID 46
Kim, S. 2018	SYSTEMATIC REVIEW with NETWORK META-ANALYSIS of RANDOMIZED CONTROLLED TRIALS of ROTATOR CUFF TEAR TREATMENT	Systematic review
Kim, S. H. 2001	Biceps load test II: A clinical test for SLAP lesions of the shoulder	*Not best available (low quality)
Kim, S. H. 2003	Arthroscopic versus mini-open salvage repair of the rotator cuff tear: outcome analysis at 2 to 6 years' follow-up	*not best available
Kim, S. H. 2015	Perianchor Cyst Formation Around Biocomposite Biodegradable Suture Anchors After Rotator Cuff Repair	same mode of surgery
Kim, S. H. 2005	The Kim test: A novel test for posteroinferior labral lesion of the shoulder - A comparison to the Jerk test	exlcuded by work group because study evaluated labral lesions instead of cuff tears
Kim, S. J. 2016	Surgical Results of Delaminated Rotator Cuff Repair Using Suture-Bridge Technique With All-Layers or Bursal Layer-Only Repair	same repair technique on diff RC tear types
Kim, S. J. 2014	Arthroscopic repair of anterosuperior rotator cuff tears: in-continuity technique vs. disruption of subscapularis-supraspinatus tear margin: comparison of clinical outcomes and structural integrity between the two techniques	repair via 2 sites, not via ancillary procedures
Kim, S. J. 2015	Arthroscopic repair of a significant (>50%) partial-thickness subscapularis tear concomitant with a full-thickness supraspinatus tear: technical considerations for subscapularis repair (transtendon technique versus tear completion)	Not best available evidence
Kim, S. J. 2013	Arthroscopic repair of massive contracted rotator cuff tears: aggressive release with anterior and posterior interval slides do not improve cuff healing and integrity	Not applicable to PICO 10; imperfect comparison
Kim, S. J. 2012	Arthroscopic repair of concomitant type II SLAP lesions in large to massive rotator cuff tears: comparison with biceps tenotomy	Not relevant to PICOs;
Kim, Y. K. 2013	Treatment outcomes of single- versus double-row repair for larger than medium-sized rotator cuff tears: the effect of preoperative remnant tendon length	*not best available

Author	Article Title	Reason for Exclusion
Kim, Y. S. 2012	Is early passive motion exercise necessary after arthroscopic rotator cuff repair?	Not best available evidence
Kim, Y. S. 2017	Tear progression of symptomatic full-thickness and partial-thickness rotator cuff tears as measured by repeated MRI	Natural history, but includes conserv treatment
Kim, Y. S. 2016	Conventional En Masse Repair Versus Separate Double-Layer Double-Row Repair for the Treatment of Delaminated Rotator Cuff Tears	Duplicate article; same as AAOS ID 459
Kim, Y. S. 2012	Does hyaluronate injection work in shoulder disease in early stage? A multicenter, randomized, single blind and open comparative clinical study	Not best available evidence
Kim, Y. S. 2017	Does an Injection of Adipose-Derived Mesenchymal Stem Cells Loaded in Fibrin Glue Influence Rotator Cuff Repair Outcomes? A Clinical and Magnetic Resonance Imaging Study	Not applicable to PICO 8; No risk factors evaluated
Kim, Y. S. 2017	Does an Injection of Adipose-Derived Mesenchymal Stem Cells Loaded in Fibrin Glue Influence Rotator Cuff Repair Outcomes? A Clinical and Magnetic Resonance Imaging Study	Not best available evidence
Kim, Y-S 2015	Outcome Comparison between in Situ Repair Versus Tear Completion Repair for Partial Thickness Rotator Cuff Tears	Full-thickness tears was excluded in study
Kirkley, A. 2003	Agreement between magnetic resonance imaging and arthroscopic evaluation of the shoulder joint in primary anterior dislocation of the shoulder	Incorrect patient population
Kirschenbaum, D. 1993	Shoulder strength with rotator cuff tears: Pre- and postoperative analysis	pts had operative treatment
Klein, S. M. 2000	Interscalene brachial plexus block with a continuous catheter insertion system and a disposable infusion pump	Duplicate study (same as AAOSID 12857)
Klinger, H. M. 2005	Arthroscopic debridement of irreparable massive rotator cuff tears--a comparison of debridement alone and combined procedure with biceps tenotomy	Not applicable to PICO 10; pts w/ arthropathy
Kloth, J. K. 2014	Comparison of 3D turbo spin-echo SPACE sequences with conventional 2D MRI sequences to assess the shoulder joint	*Not best available (low quality)
Klouche, S. 2016	Return to Sport After Rotator Cuff Tear Repair: A Systematic Review and Meta-analysis	Systematic review
Kluczynski, M. A. 2014	Does body mass index affect outcomes of ambulatory knee and shoulder surgery?	Systematic review

Author	Article Title	Reason for Exclusion
Kluczynski, M. A. 2016	Does Early Versus Delayed Active Range of Motion Affect Rotator Cuff Healing After Surgical Repair? A Systematic Review and Meta-analysis	Systematic review/meta analysis
Kluczynski, M. A. 2015	Early Versus Delayed Passive Range of Motion After Rotator Cuff Repair: A Systematic Review and Meta-analysis	Systematic review
Kluger, R. 2003	Sonographic versus magnetic resonance arthrographic evaluation of full-thickness rotator cuff tears in millimeters	all pts w/RCT, diagnostic measurement of width/retraction, not tear
Kluger, R. 2003	Sonographic versus magnetic resonance arthrographic evaluation of full-thickness rotator cuff tears in millimeters	*Not best available (moderate quality)
Ko, S. H. 2009	A Prospective Therapeutic Comparison of Simple Suture Repairs to Massive Cuff Stitch Repairs for Treatment of Small- and Medium-Sized Rotator Cuff Tears	*not best available
Ko, S. H. 2008	Arthroscopic Single-Row Supraspinatus Tendon Repair With a Modified Mattress Locking Stitch: A Prospective, Randomized Controlled Comparison With a Simple Stitch	*not best available
Ko, Sh 2008	Arthroscopic single-row supraspinatus tendon repair with a modified mattress locking stitch: a prospective, randomized controlled comparison with a simple stitch	Duplicate study (same as AAOSID 9682)
Kocaoglu, B. 2015	Foreseeing the danger in the beach chair position: Are standard measurement methods reliable?	not a relevant study or review
Koester, M. C. 2007	The efficacy of subacromial corticosteroid injection in the treatment of rotator cuff disease: A systematic review	Systematic review
Koh, K. H. 2014	Effect of immobilization without passive exercise after rotator cuff repair: randomized clinical trial comparing four and eight weeks of immobilization	same as A12564
Koh, Kh 2011	Prospective randomized clinical trial of single- versus double-row suture anchor repair in 2- to 4-cm rotator cuff tears: clinical and magnetic resonance imaging results	Duplicate study (same as AAOSID 2706)
Koh, W. U. 2016	A randomised controlled trial comparing continuous supraclavicular and interscalene brachial plexus blockade for open rotator cuff surgery	Imperfect comparison group (both groups received 20mL ropivacaine)

Author	Article Title	Reason for Exclusion
Koivikko, Mp 2008	Shoulder magnetic resonance arthrography: a prospective randomized study of anterior and posterior ultrasonography-guided contrast injections	No sensitivity/specificity, LR, or ROC curve values
Kokkalis, Z. T. 2014	Human dermal allograft for massive rotator cuff tears	retrospective; non-comparative study
Kolk, A. 2017	The effect of a rotator cuff tear and its size on three-dimensional shoulder motion	Retrospective case series
Kolk, A. 2017	Does acromioplasty result in favorable clinical and radiologic outcomes in the management of chronic subacromial pain syndrome? A double-blinded randomized clinical trial with 9 to 14 years' follow-up	Incorrect patient population (not exclusive to full-thickness tears)
Kolk, A. 2016	Predictors of disease-specific quality of life after arthroscopic rotator cuff repair	Not indicative of exclusivity to full-thickness tears for prognostic patients
Kolo, F. C. 2017	Fosbury flop tear of the rotator cuff: diagnostic assessment with magnetic resonance arthrography	Not best available evidence
Koltka, K 2011	Postoperative analgesia for arthroscopic rotator cuff surgery: a comparison between subacromial and interscalene levobupivacaine	interscalene block given w/2 different analgesic requirements
Koltka, K. 2011	Postoperative analgesia for arthroscopic rotator cuff surgery: A comparison between subacromial and interscalene levobupivacaine	Duplicate study (same as AAOSID 2730)
Koltka, K. 2011	Postoperative analgesia for arthroscopic rotator cuff surgery: a comparison between subacromial and interscalene levobupivacaine	Not best available evidence
Koo, S. S. 2011	Reduction of postoperative stiffness after arthroscopic rotator cuff repair: results of a customized physical therapy regimen based on risk factors for stiffness	not all pts w/ FTT and did not stratify outcomes by tear type;
Koorevaar, R. C. T. 2016	The influence of preoperative and postoperative psychological symptoms on clinical outcome after shoulder surgery: A prospective longitudinal cohort study	Incorrect patient population (Includes patients aged <18)
Kopka, L. 1994	MR arthrography of the shoulder with gadopentetate dimeglumine: Influence of concentration, iodinated contrast material, and time on signal intensity	no tear assessment
Koppenhaver, S. 2016	Effects of dry needling to the symptomatic versus control shoulder in patients with unilateral subacromial pain syndrome	Not best available evidence

Author	Article Title	Reason for Exclusion
Kordasiewicz, B. 2017	Comparative study of open and arthroscopic coracoid transfer for shoulder anterior instability (Latarjet)â??clinical results at short term follow-up	*not best available
Kose, K. C. 2008	Mini-open versus all-arthroscopic rotator cuff repair: Comparison of the operative costs and the clinical outcomes	Very low quality
Kose, K. C. 2008	Mini-open versus all-arthroscopic rotator cuff repair: comparison of the operative costs and the clinical outcomes	Very low quality
Kraeutler, Mj 2015	Compressive cryotherapy versus ice-a prospective, randomized study on postoperative pain in patients undergoing arthroscopic rotator cuff repair or subacromial decompression	repeat article
Krey, D. 2015	Tendon needling for treatment of tendinopathy: A systematic review	Systematic Review
Krischak, G. 2013	A prospective randomized controlled trial comparing occupational therapy with home-based exercises in conservative treatment of rotator cuff tears	Does not address question of interest
Krishnan, S. G. 2008	Arthroscopic repair of full-thickness tears of the rotator cuff in patients younger than 40 years	Very low quality
Kromer, T. O. 2013	Physiotherapy in patients with clinical signs of shoulder impingement syndrome: a randomized controlled trial	shoulder surgery w/in last 12 mos excluded
Kromer, T. O. 2009	Effects of physiotherapy in patients with shoulder impingement syndrome: A systematic review of the literature	Systematic review
Kuhn, J. E. 2009	Exercise in the treatment of rotator cuff impingement: a systematic review and a synthesized evidence-based rehabilitation protocol	Systematic review
Kuhn, J. E. 2013	Effectiveness of physical therapy in treating atraumatic full-thickness rotator cuff tears: a multicenter prospective cohort study	patients did not have primary surgery to repair RC FTT
Kukkonen, J 2015	Treatment of Nontraumatic Rotator Cuff Tears: A Randomized Controlled Trial with Two Years of Clinical and Imaging Follow-up	does not fit PICO 7 because patients have full thickness RCT
Kukkonen, J. 2014	Treatment of non-traumatic rotator cuff tears: A randomised controlled trial with one-year clinical results	Same as AAOS ID 1730
Kukkonen, J. 2014	Treatment of non-traumatic rotator cuff tears: A randomised controlled trial with one-year clinical results	*operative treatment contains concomitant surgery

Author	Article Title	Reason for Exclusion
Kukkonen, J. 2014	Smoking and operative treatment of rotator cuff tear	Duplicate study (same as AAOSID 1789)
Kukkonen, J. 2015	The effect of tear size on the treatment outcome of operatively treated rotator cuff tears	not a relevant study or review
Kukkonen, J. 2014	Smoking and operative treatment of rotator cuff tear	Not indicative of exclusivity to full-thickness tears for prognostic patients
Kukkonen, J. 2013	The effect of biceps procedure on the outcome of rotator cuff reconstruction	Not best available evidence
Kum, D. H. 2017	Acromion Index in Korean Population and Its Relationship with Rotator Cuff Tears	Not relevant to PICO's;
Kumar, K. 2017	Unused Opioid Pills After Outpatient Shoulder Surgeries Given Current Perioperative Prescribing Habits	not relevant to PICO 12
Kurol, M. 1991	Sonography for diagnosis of rotator cuff tear. Comparison with observations at surgery in 58 shoulders	*Not best available (moderate quality)
Kurowicki, J. 2017	Speed of recovery after arthroscopic rotator cuff repair	not relevant
Kurup, H. 2011	Dynamic compression plating versus locked intramedullary nailing for humeral shaft fractures in adults	Systematic review
Kurz, A. Z. 2016	Effect of surgeon-sonographer interaction on ultrasound diagnosis of rotator cuff tears: a five-year cohort study in 775 shoulders	*Not best available (low quality)
Kurz, A. Z. 2016	Effect of surgeon-sonographer interaction on ultrasound diagnosis of rotator cuff tears: a five-year cohort study in 775 shoulders	*Not best available (low quality)
Kweon, C. 2015	Surgical Versus Nonsurgical Management of Rotator Cuff Tears: Predictors of Treatment Allocation	Does not address prognostic question of interest
Kweon, C. Y. 2014	Surgical versus Non-surgical Management of Rotator Cuff Tears: Predictors of Treatment Allocation	Insufficient data
L��rdemann, A. 2012	Revision arthroscopic rotator cuff repair: Systematic review and authors' preferred surgical technique	Systematic review
L��rdemann, A. 2015	Massive rotator cuff tears: definition and treatment	Background article
L��rdemann, A. 2016	In vivo clinical and radiological effects of platelet-rich plasma on interstitial supraspinatus lesion: Case series	Prospective case series
L��hteenm��ki, H. E. 2007	Repair of full-thickness rotator cuff tears is recommended regardless of tear size and age: A retrospective study of 218 patients	Very low quality

Author	Article Title	Reason for Exclusion
Ladermann, A. 2016	Management of failed rotator cuff repair: a systematic review	Systematic Review
Ladermann, A. 2012	Revision arthroscopic rotator cuff repair: systematic review and authors' preferred surgical technique	Systematic Review
Laffont, I. 2010	Aging and sequelae of poliomyelitis	Narrative review
Lafosse, L. 2008	The outcome and structural integrity of arthroscopic rotator cuff repair with use of the double-row suture anchor technique. Surgical technique	no comparison group
Lambers Heerspink, F. O. 2014	Specific patient-related prognostic factors for rotator cuff repair: A systematic review	Systematic Review
Lambers Heerspink, F. O. 2014	Specific patient-related prognostic factors for rotator cuff repair: a systematic review	Systematic review
Lambers Heerspink, F. O. 2011	Clinical and radiological outcome of conservative vs. surgical treatment of atraumatic degenerative rotator cuff rupture: design of a randomized controlled trial	no data; protocol
Lambers Heerspink, F. O. 2015	Comparing surgical repair with conservative treatment for degenerative rotator cuff tears: A randomized controlled trial	repeat article
Lambers Heerspink, F. O. 2015	Comparing surgical repair with conservative treatment for degenerative rotator cuff tears: a randomized controlled trial	Same as AAOS ID 12560
Landfair, G. L. 2015	Does smoking affect treatment allocation and outcomes in patients with rotator cuff tears?	Insufficient data
Lang, T. R. 2017	What tendon pathology is seen on imaging in people who have taken fluoroquinolones? A systematic review	Systematic review
Lanza, E. 2015	Ultrasound-guided percutaneous irrigation in rotator cuff calcific tendinopathy: what is the evidence? A systematic review with proposals for future reporting	Systematic Review
Lapner, P. L. 2015	Rotator cuff fatty infiltration and atrophy are associated with functional outcomes in anatomic shoulder arthroplasty	No RCTs - WRONG PDF
Lapner, P. L. 2012	A multicenter randomized controlled trial comparing single-row with double-row fixation in arthroscopic rotator cuff repair	Duplicate study (same as AAOSID 12584)
Lapner, P. L. C. 2014	Rotator Cuff Fatty Infiltration and Atrophy Are Associated With Functional Outcomes in Anatomic Shoulder Arthroplasty	factors not included in PICO 8



Author	Article Title	Reason for Exclusion
Lapner, P. L. C. 2012	A multicenter randomized controlled trial comparing single-row with double-row fixation in arthroscopic rotator cuff repair	same text as A12584
Lasbleiz, S. 2014	Diagnostic value of clinical tests for degenerative rotator cuff disease in medical practice	*Not best available (low quality)
Lashgari, C. 2012	The natural history of rotator cuff tears	Natural History
Lastayo, P. C. 1998	Continuous passive motion after repair of the rotator cuff. A prospective outcome study	no immobilization in pts
Lastayo, Pc 1998	Continuous passive motion after repair of the rotator cuff. A prospective outcome study	not a relevant study or review
Laudicina, L. 2005	Management of irreparable rotator cuff tears and glenohumeral arthritis	Background article
Lawrence, C. 2016	Influence of Glenosphere Design on Outcomes and Complications of Reverse Arthroplasty: A Systematic Review	Irrelevant Systematic Review
Lawrence, R. L. 2017	Effect of glenohumeral elevation on subacromial supraspinatus compression risk during simulated reaching	incorrect patient population
Lazarides, A. L. 2015	Rotator cuff tears in young patients: a different disease than rotator cuff tears in elderly patients	Systematic review
Lazaro, L. E. 2017	Physical exam of the adolescent shoulder: Tips for evaluating and diagnosing common shoulder disorders in the adolescent athlete	Background article
Le Corroller, T. 2008	Sonography of the painful shoulder: role of the operator's experience	*Not best available (moderate quality)
Le Goff, B. 2010	Assessment of calcific tendonitis of rotator cuff by ultrasonography: Comparison between symptomatic and asymptomatic shoulders	study does not observe diagnosis of RC tears
Lecouvet, F. E. 2007	Cartilage lesions of the glenohumeral joint: diagnostic effectiveness of multidetector spiral CT arthrography and comparison with arthroscopy	*Not best available (moderate quality)
Lee, A. R. 2012	Magnesium added to bupivacaine prolongs the duration of analgesia after interscalene nerve block	repeat AAOS ID 12675
Lee, B. G. 2012	Effect of two rehabilitation protocols on range of motion and healing rates after arthroscopic rotator cuff repair: aggressive versus limited early passive exercises	Duplicate study (same as AAOSID 12555)
Lee, Bg 2012	Effect of two rehabilitation protocols on range of motion and healing rates after arthroscopic rotator cuff repair: aggressive versus limited early passive exercises	Does not address post-operative question of interest (timing)

Author	Article Title	Reason for Exclusion
Lee, C. B. 2014	Ectopic insertion of the pectoralis minor tendon: inter-reader agreement and findings in the rotator interval on MRI	did not examine for RC tear;
Lee, C. S. 2014	Analysis of Low-Field MRI Scanners for Evaluation of Shoulder Pathology Based on Arthroscopy	*Not best available (moderate quality)
Lee, D. H. 2017	Relation Between Subacromial Bursitis on Ultrasonography and Efficacy of Subacromial Corticosteroid Injection in Rotator Cuff Disease: A Prospective Comparison Study	all pts receive injection
Lee, D. H. 2015	Prolotherapy for Refractory Rotator Cuff Disease: Retrospective Case-Control Study of 1-Year Follow-Up	Not best available evidence
Lee, H. S. 2002	Sonography of the shoulder after arthrography (arthrosonography): preliminary results	*Not best available (moderate quality)
Lee, HJ 2016	Surgical treatment of lesions of the long head of the biceps brachii tendon with rotator cuff tear: a prospective randomized clinical trial comparing the clinical results of tenotomy and tenodesis	concomitant vs. concomitant
Lee, J. H. 2015	Diagnostic performance of indirect MR arthrography for the diagnosis of rotator cuff tears at 3.0 T	*Not best available (low quality)
Lee, J. H. 2014	Comparison of three-dimensional isotropic and two-dimensional conventional indirect MR arthrography for the diagnosis of rotator cuff tears	*Not best available (moderate quality)
Lee, J. H. 2015	Rotator cuff tears noncontrast MRI compared to MR arthrography	*Not best available (moderate quality)
Lee, J. J. 2014	Effect of ultrasonographically guided axillary nerve block combined with suprascapular nerve block in arthroscopic rotator cuff repair: a randomized controlled trial	Duplicate study (same as AAOSID 12571)
Lee, J. J. 2015	Efficacy of direct arthroscopy-guided suprascapular nerve block after arthroscopic rotator cuff repair: a prospective randomized study	Duplicate study (same as AAOSID 12596)
Lee, Jh 2011	Ropivacaine for ultrasound-guided interscalene block: 5Â mL provides similar analgesia but less phrenic nerve paralysis than 10Â mL	repeat of AAOS ID 12900
Lee, K. W. 2014	A comparison of conventional ultrasonography and arthrosonography in the assessment of cuff integrity after rotator cuff repair	Does not address diagnostic question of interest
Lee, K. W. 2018	Clinical outcomes and repair integrity after arthroscopic full-thickness rotator cuff repair:	Not best available evidence

Author	Article Title	Reason for Exclusion
	suture-bridge versus double-row modified Mason-Allen technique	
Lee, M. H. 2003	Adhesive Capsulitis of the Shoulder: Diagnosis Using Magnetic Resonance Arthrography, with Arthroscopic Findings as the Standard	diagnosing frozen shoulder, not RC tears
Lee, R. W. 2016	Diagnostic accuracy of 3T conventional shoulder MRI in the detection of the long head of the biceps tendon tears associated with rotator cuff tendon tears	Duplicate to AAOSID 5576
Lee, S. H. 2018	Comparison between 3D isotropic and 2D conventional MR arthrography for diagnosing rotator cuff tear and labral lesions: A meta-analysis	Meta-analysis
Lee, S. H. 2017	Direct shoulder magnetic resonance arthrography for superior labral anterior-To-posterior (SLAP) and Bankart lesions: Investigation into the appropriate dose and level of local anesthesia	Does not address question of interest
Lee, S. M. 2012	Analgesic effectiveness of nerve block in shoulder arthroscopy: comparison between interscalene, suprascapular and axillary nerve blocks	Not best available evidence
Lee, S. U. 2016	Real-time sonoelastography in the diagnosis of rotator cuff tendinopathy	*Not best available (moderate quality)
Lee, S. W. 2018	Point-of-Care Ultrasonography Findings and Care Use Among Patients Undergoing Ultrasound-Guided Shoulder Injections	Not best available evidence
Lee, S. Y. 2011	The midterm effectiveness of extracorporeal shockwave therapy in the management of chronic calcific shoulder tendinitis	Systematic review
Lee, Sm 2012	Analgesic effectiveness of nerve block in shoulder arthroscopy: comparison between interscalene, suprascapular and axillary nerve blocks	Duplicate study (same as AAOSID 2374)
Lee, Y. H. 2014	Magnetic resonance visualization of surgical classification of rotator cuff tear: comparison with three-dimensional shoulder magnetic resonance arthrography at 3.0 T	*Not best available (moderate quality)
Lee, Y. S. 2017	Evaluation of the Risk Factors for a Rotator Cuff Retear After Repair Surgery	Incorrect patient population (not exclusive to full-thickness tears)
Lee, Y. S. 2017	Evaluation of the Risk Factors for a Rotator Cuff Retear After Repair Surgery	duplicate article; same as AAOS ID 62
Lehtimäki, K. 2018	Risk and risk factors for revision after primary reverse shoulder arthroplasty for cuff tear	Incorrect patient population (includes arthropathy)

Author	Article Title	Reason for Exclusion
	arthropathy and osteoarthritis: a Nordic Arthroplasty Register Association study	
Lenza, M. 2013	Magnetic resonance imaging, magnetic resonance arthrography and ultrasonography for assessing rotator cuff tears in people with shoulder pain for whom surgery is being considered	Systematic review
Lenza, M. 2013	Magnetic resonance imaging, magnetic resonance arthrography and ultrasonography for assessing rotator cuff tears in people with shoulder pain for whom surgery is being considered	Systematic review
Leong, H. T. 2017	Rotator cuff tendinopathy alters the muscle activity onset and kinematics of scapula	Does not address diagnostic question of interest
Leroux, J. L. 1995	Diagnostic value of clinical tests for shoulder impingement syndrome	determining location of tear, not diagnosing RCT
Leroux, T. 2013	Combined arthroscopic bankart repair and remplissage for recurrent shoulder instability	Systematic review
Leroux, T. 2015	A Systematic Review and Meta-analysis Comparing Clinical Outcomes After Concurrent Rotator Cuff Repair and Long Head Biceps Tenodesis or Tenotomy	Systematic Review
Leschinger, T. 2017	In vivo analysis of coracoid and subacromial shoulder impingement mechanism during clinical examination	all healthy patients
Lesko, P. D. 2001	Variation of the arthroscopic Mumford procedure for resecting the distal clavicle	Not best available evidence
Leung, A. S. 2017	Cuff tear arthropathy shoulder hemiarthroplasty: a radiographic outcome study	Incorrect patient population (includes arthropathy)
Levine, B. D. 2012	Imaging of the shoulder: a comparison of MRI and ultrasound	Background article
Levine, W. N. 2006	Arthroscopic distal clavicle resection: a comparison of bursal and direct approaches	*not best available
Levy, D. M. 2016	Rotator cuff tears after total shoulder arthroplasty in primary osteoarthritis: A systematic review	Systematic review
Lewington, M. R. 2017	Graft Utilization in the Bridging Reconstruction of Irreparable Rotator Cuff Tears: A Systematic Review	Systematic review
Lewis, J. S. 2009	Rotator cuff tendinopathy: is there a role for polyunsaturated Fatty acids and antioxidants?	narrative review
Lewis, J. S. 2007	The pectoralis minor length test: a study of the intra-rater reliability and diagnostic accuracy in subjects with and without shoulder symptoms	No objective gold standard
Li, S. 2018	The clinical effect of rehabilitation following arthroscopic rotator cuff repair: A meta-analysis of early versus delayed passive motion	Systematic review

Author	Article Title	Reason for Exclusion
Li, X. 2014	Are platelet concentrates an ideal biomaterial for arthroscopic rotator cuff repair? A meta-analysis of randomized controlled trials	Meta-analysis
Li, X. 2017	Relationship between acromial morphological variation and subacromial impingement: A three-dimensional analysis	not a diagnostics study; looking at differing morphological, not accuracy/specificity/sensitivity of diagnostic imaging tools
Li, X. X. 1999	MR evaluation of subscapularis tears	reviewing tears in various planes, not testing diagnostic ability
Li, X. X. 1999	MR evaluation of subscapularis tears	evaluating image planes of MRI, not diff imaging modalities
Liao, W. 2016	Is Arthroscopic Technique Superior to Open Reduction Internal Fixation in the Treatment of Isolated Displaced Greater Tuberosity Fractures?	excludes any pts with full thickness RC tears
Lichtenberg, S. 2012	Are there advantages of the combined latissimus-dorsi transfer according to L'Episcopo compared to the isolated latissimus-dorsi transfer according to Herzberg after a mean follow-up of 6 years? A matched-pair analysis	Very low quality
Liem, D. 2008	Clinical and structural results of partial supraspinatus tears treated by subacromial decompression without repair	Not best available evidence
Liem, D. 2007	Clinical outcome and tendon integrity of arthroscopic versus mini-open supraspinatus tendon repair: a magnetic resonance imaging-controlled matched-pair analysis	Very low quality
Lill, H. 2012	All-arthroscopic intramedullary nailing of 2- and 3-part proximal humeral fractures: A new arthroscopic technique and preliminary results	less than 10 pts per group
Lim, H. C. 2014	Randomised trial support for orthopaedic surgical procedures	Systematic review
Lim, J. T. K. 2005	Recovery after arthroscopic subacromial decompression: Prognostic value of the subacromial injection test	Imperfect comparison group
Lim, W. A. 2015	Outcomes are favorable in Asian patients undergoing deltoid-on open rotator cuff repair without acromioplasty	no comparison group

Author	Article Title	Reason for Exclusion
Lim, W. A. J. 2015	Outcomes are favorable in Asian patients undergoing deltoid-on open rotator cuff repair without acromioplasty	no comparison group
Lin, L. 2016	The diagnostic value of magnetic resonance imaging for different types of subscapularis lesions	*Not best available (moderate quality)
Lin, Y. L. 2016	Four-week exercise program does not change rotator cuff muscle activation and scapular kinematics in healthy subjects	healthy participants
Lincoln, A. E. 2002	The natural history and risk factors of musculoskeletal conditions resulting in disability among US army personnel	Natural history No data on patients with rotator cuff injuries
Lindley, K. 2010	Outcomes of arthroscopic versus open rotator cuff repair: a systematic review of the literature	Systematic Review
Ling, Y. 2015	Gene polymorphism of IL-6 and MMP-3 decreases passive range of motion after rotator cuff repair	not a relevant study or review
Littlejohn, Iii T. W. 2009	Long-term safety, tolerability and efficacy of combination therapy with aliskiren and amlodipine in patients with hypertension	Not applicable to PICO 8; no risk factors; intervention study
Littlewood, C. 2012	Exercise for rotator cuff tendinopathy: A systematic review	Systematic review
Littlewood, C. 2012	A mixed methods study to evaluate the clinical and cost-effectiveness of a self-managed exercise programme versus usual physiotherapy for chronic rotator cuff disorders: protocol for the SELF study	study proposal; no data
Littlewood, C. 2016	A self-managed single exercise programme versus usual physiotherapy treatment for rotator cuff tendinopathy: a randomised controlled trial (the SELF study)	Incorrect patient population (no indication of primary RC repair)
Littlewood, C. 2015	Rehabilitation following rotator cuff repair: a systematic review	Systematic Review
Littlewood, C. 2015	Therapeutic exercise for rotator cuff tendinopathy: a systematic review of contextual factors and prescription parameters	systematic review
Littlewood, C. 2014	Self-managed loaded exercise versus usual physiotherapy treatment for rotator cuff tendinopathy: A pilot randomised controlled trial	pts did not undergo surgery, all have tendinopathy
Liu, J 2017	Comparison of clinical outcomes in all-arthroscopic versus mini-open repair of rotator cuff tears: a randomized clinical trial	Duplicate article; same as AAOS ID 908
Liu, J. 2017	Comparison of clinical outcomes in all-arthroscopic versus mini-open repair of rotator cuff tears	SAME AS AAOS ID 908

Author	Article Title	Reason for Exclusion
Liu, S. H. 1994	Arthroscopically assisted rotator cuff repair: correlation of functional results with integrity of the cuff	Very low quality
Liu, X. N. 2018	Functional and Radiographic Outcomes After Arthroscopic Transosseous Suture Repair of Medium Sized Rotator Cuff Tears	Not applicable to PICO 8; no relevant risk factors
Liu, Xn 2017	Effects of a Single-Dose Interscalene Block on Pain and Stress Biomarkers in Patients Undergoing Arthroscopic Rotator Cuff Repair: a Randomized Controlled Trial	Not best available evidence
Liu, Xn 2016	Effects of a Single-Dose Interscalene Block on Pain and Stress Biomarkers in Patients Undergoing Arthroscopic Rotator Cuff Repair: a Randomized Controlled Trial	Duplicate study (same as AAOSID 191)
Lo, H. C. 2016	Quantitative diffusion-weighted magnetic resonance imaging for the diagnosis of partial-thickness rotator cuff tears	*Not best available (moderate quality)
Lo, I. K. Y. 2004	An Evaluation of the Apprehension, Relocation, and Surprise Tests for Anterior Shoulder Instability	no tear assessment
Lo, S. F. 2003	Arthrographic and clinical findings in patients with hemiplegic shoulder pain	no diagnosis for tear, just pain
Loehr, S. P. 1995	Three-dimensional MRI of the glenoid labrum	*Not best available (moderate quality)
Loew, M. 2015	How to discriminate between acute traumatic and chronic degenerative rotator cuff lesions: an analysis of specific criteria on radiography and magnetic resonance imaging	RC tears was not an outcome
Loew, R 2000	MR arthrography of the shoulder: comparison of low-field (0.2 T) vs high-field (1.5 T) imaging	less than 10 patients in negative reference standards
Loew, R. 2000	MR arthrography of the shoulder: comparison of low-field (0.2 T) vs high-field (1.5 T) imaging	*Not best available (low quality)
Longo, U. G. 2011	Biological resurfacing for early osteoarthritis of the shoulder	Background article
Longo, U. G. 2011	Latissimus dorsi tendon transfer for massive irreparable rotator cuff tears: a systematic review	Systematic Review
Longo, U. G. 2011	Synthetic augmentation for massive rotator cuff tears	Background article
Longo, U. G. 2010	Tendon augmentation grafts: a systematic review	Systematic review
Longo, U. G. 2014	Remplissage, humeral osteochondral grafts, Weber osteotomy, and shoulder arthroplasty for the management of humeral bone defects in shoulder	Systematic review

Author	Article Title	Reason for Exclusion
	instability: Systematic review and quantitative synthesis of the literature	
Longo, U. G. 2014	Role of serum fibrinogen levels in patients with rotator cuff tears	control group is not relevant to PICO
Longo, U. G. 2015	Multidirectional instability of the shoulder: A systematic review	Systematic review
Longo, U. G. 2012	Instruments to assess patients with rotator cuff pathology: a systematic review of measurement properties	Systematic review
Lopez, J. G. 2000	Acromioplasty: comparison of outcome in patients with and without workers' compensation	Not applicable to PICO 8; no RC tear
Louwerens, J. K. 2014	Evidence for minimally invasive therapies in the management of chronic calcific tendinopathy of the rotator cuff: a systematic review and meta-analysis	Systematic review
Louwerens, J. K. 2016	The Effectiveness of High-Energy Extracorporeal Shockwave Therapy Versus Ultrasound-Guided Needling Versus Arthroscopic Surgery in the Management of Chronic Calcific Rotator Cuff Tendinopathy: A Systematic Review	Systematic review
Louwerens, J. K. G. 2014	Evidence for minimally invasive therapies in the management of chronic calcific tendinopathy of the rotator cuff: A systematic review and meta-analysis	systematic review/meta analysis
Louwerens, J. K. G. 2016	The effectiveness of high-energy extracorporeal shockwave therapy versus ultrasound-guided needling versus arthroscopic surgery in the management of chronic calcific rotator cuff tendinopathy: A systematic review	Systematic review
Lu, H. Y. 2014	Predicting rotator cuff tears using data mining and Bayesian likelihood ratios	Very low quality
Lu, Y. 2013	Is radiofrequency treatment effective for shoulder impingement syndrome? A prospective randomized controlled study	pts do not have RC tears, only impingement syndrome
Lubiatowski, P. 2013	Clinical and biomechanical performance of patients with failed rotator cuff repair	retrospective; non-comparative study
Lubowitz, J. H. 2015	Editorial Commentary: Rotator Cuff Repair Imaging Shows Retear at 1 Year Follow-up	editorial commentary
Lucena, T. R. 2015	The temporal outcomes of open versus arthroscopic knotted and knotless rotator cuff repair over 5 years	*not best available
Lupo, R. 2000	Surgery in massive ruptures of the rotator cuff: results as related to prognosis	Not applicable to PICO 8; no multivariate analysis



Author	Article Title	Reason for Exclusion
Lupo, R. 2001	Ultrasound and MRI for the long-term evaluation of surgical repair of the rotator cuffs	no diagnosis of tear by US/MRI in this study
Lyons, A. R. 1992	Clinical diagnosis of tears of the rotator cuff	N/A
Lyons, T. R. 2001	Laser-assisted capsulorrhaphy for multidirectional instability of the shoulder	Prospective case series
Lyons, T. R. 2001	Arthroscopic repair of partial-thickness tears of the rotator cuff	Prospective case series
Ma, H. L. 2012	Clinical outcome and imaging of arthroscopic single-row and double-row rotator cuff repair: A prospective randomized trial	Duplicate study (same as AAOSID 12570)
Ma, H. L. 2012	Clinical outcome and imaging of arthroscopic single-row and double-row rotator cuff repair: a prospective randomized trial	same as A12570
Ma, J. 2013	Intramedullary nail versus dynamic compression plate fixation in treating humeral shaft fractures: Grading the evidence through a meta-analysis	Meta-analysis
MacDermid, J. C. 2006	All-arthroscopic versus mini-open repair of small or moderate-sized rotator cuff tears: A protocol for a randomized trial [NCT00128076]	Protocol
MacDermid, J. C. 2006	All-arthroscopic versus mini-open repair of small or moderate-sized rotator cuff tears: a protocol for a randomized trial [NCT00128076]	a protocol for a study, not a study itself
MacDonald, P. B. 2000	An analysis of the diagnostic accuracy of the Hawkins and Neer subacromial impingement signs	*Not best available (moderate quality)
MacKechnie, M. A. 2014	Repair of full-thickness rotator cuff tears in patients aged younger than 55 years	Systematic review
MacKechnie, M. A. K. 2014	Repair of full-thickness rotator cuff tears in patients aged younger than 55 years	Systematic review
Maffulli, N. 2012	Tissue engineering for rotator cuff repair: an evidence-based systematic review	Systematic Review
Maffulli, N. 2010	Current treatment options for tendinopathy	narrative review
Magee, T. 2009	3-T MRI of the shoulder: Is MR arthrography necessary?	N/A
Maher, A. 2017	Gender, ethnicity and smoking affect pain and function in patients with rotator cuff tears	Incorrect patient population (not exclusive to primary surgical repair)
Mahmoud, M. K. 2013	One-shot MR and MDCT arthrography of shoulder lesions with arthroscopic correlation	*Not best available (moderate quality)
Mahure, S. A. 2016	The Incidence of Subsequent Surgery After Outpatient Arthroscopic Rotator Cuff Repair	Not applicable to PICO 8; pts had subsequent surgery

Author	Article Title	Reason for Exclusion
Makhni, E. C. 2017	How Comprehensive and Efficient Are Patient-Reported Outcomes for Rotator Cuff Tears?	Systematic Review
Malavolta, E. A. 2014	Full-thickness supraspinatus tendon tears: correlation of findings by arthroscopy and magnetic resonance imaging	study does not diagnose RC tears
Malavolta, E. A. 2016	Accuracy of preoperative MRI in the diagnosis of subscapularis tears	*Not best available (moderate quality)
Malavolta, E. A. 2016	Serial structural MRI evaluation of arthroscopy rotator cuff repair: does Sugaya's classification correlate with the postoperative clinical outcomes?	using Sugaya's classification for POST-op correlation w/clinical outcomes, not diagnostic
Malavolta, E. A. 2015	Full-thickness supraspinatus tendon tears: correlation of findings by arthroscopy and magnetic resonance imaging	all pts with RC tears, article measures tear size and retraction w/arthroscopy, MRI
Malavolta, E. A. 2016	Accuracy of preoperative MRI in the diagnosis of subscapularis tears	*Not best available (moderate quality)
Malavolta, E. A. 2015	Accuracy of preoperative MRI in the diagnosis of disorders of the long head of the biceps tendon	*Not best available (moderate quality)
Malavolta, E. A. 2014	Platelet-rich plasma in rotator cuff repair: a prospective randomized study	same as A1558
Malavolta, E. A. 2012	Platelet-Rich Plasma in Arthroscopic Repairs of Complete Tears of the Rotator Cuff	no comparison, same technique on all pts
Malhi, A. M. 2005	Correlation between clinical diagnosis and arthroscopic findings of the shoulder	Only 4 patients with RC tears;
Malkani, A. L. 2004	Transfer of the long head of the triceps tendon for irreparable rotator cuff tears	less than 10 per group
Mall, N. A. 2012	Outcomes of arthroscopic and open surgical repair of isolated subscapularis tendon tears	Systematic review
Mall, N. A. 2010	Symptomatic progression of asymptomatic rotator cuff tears: a prospective study of clinical and sonographic variables	not relevant to PICO's
Mall, N. A. 2013	An evidenced-based examination of the epidemiology and outcomes of traumatic rotator cuff tears	Systematic review
Mall, N. A. 2013	Transosseous-equivalent rotator cuff repair: a systematic review on the biomechanical importance of tying the medial row	Systematic review
Mall, N. A. 2014	Factors affecting rotator cuff healing	Narrative Review
Mallon, W. J. 2004	The impact of preoperative smoking habits on the results of rotator cuff repair	same risks factors assessed in a high quality study

Author	Article Title	Reason for Exclusion
Maman, E. 2009	Outcome of nonoperative treatment of symptomatic rotator cuff tears monitored by magnetic resonance imaging	Natural History
Maman, E. 2016	Detrimental Effect of Repeated and Single Subacromial Corticosteroid Injections on the Intact and Injured Rotator Cuff: A Biomechanical and Imaging Study in Rats	rats
Mancini, G. B. 2001	Anterior shoulder dislocation and injuries of the rotator cuff in patients aged over 40 years. Clinical and sonographic study	*Not best available (low quality)
Mardani-Kivi, M. 2016	Rotator Cuff Repair: Is there any role for acromioplasty?	Not best available evidence
Marhofer, P. 2015	A retrospective analysis of 509 consecutive interscalene catheter insertions for ambulatory surgery	no comparison group
Marius, V. 2015	Treatment of Anterior Instability of the Shoulder	*not best available
Martín-Hervás, C. 2001	Ultrasonographic and magnetic resonance images of rotator cuff lesions compared with arthroscopy or open surgery findings	*Not best available (moderate quality)
Martens, J. 2015	Electromyography in the four competitive swimming strokes: A systematic review	Systematic review
Martin-Hervas, C. 2001	Ultrasonographic and magnetic resonance images of rotator cuff lesions compared with arthroscopy or open surgery findings	*Not best available (moderate quality)
Masaoka, S. 1999	Ultrasonographic analysis of shoulder rotator cuff tears	*Not best available (moderate quality)
Mascarenhas, R. 2014	Is double-row rotator cuff repair clinically superior to single-row rotator cuff repair: a systematic review of overlapping meta-analyses	Systematic review
Mason, B. J. 1999	Occult fractures of the greater tuberosity of the humerus: radiographic and MR imaging findings	Incorrect patient population (<10 patients)
Mathew, A. J. 2011	Rheumatic-musculoskeletal manifestations in type 2 diabetes mellitus patients in south India	Incorrect patient population
Matis, N. 2006	Arthroscopic transosseous reinsertion of the rotator cuff	Not relevant to PICO's;
Matsen, F. A. 2015	Factors affecting length of stay, readmission, and revision after shoulder arthroplasty a population-based study	not all pts have RC tear; did not stratify by RC tear
Matsen, F. A. 2016	What Factors are Predictive of Patient-reported Outcomes? A Prospective Study of 337 Shoulder Arthroplasties	Incorrect patient population amongst prognostic (arthropathy)

Author	Article Title	Reason for Exclusion
Maugars, Y. 2009	Treatment of shoulder calcifications of the cuff: A controlled study	excludes any known tear of RC
Mazuquin, B. F. 2016	Effectiveness of early compared with conservative rehabilitation for patients having rotator cuff repair surgery: an overview of systematic reviews	Systematic review
Mazuquin, B. F. 2018	Effectiveness of early compared with conservative rehabilitation for patients having rotator cuff repair surgery: an overview of systematic reviews	Systematic review
Mazzocca, A. D. 2017	The Effect of Early Range of Motion on Quality of Life, Clinical Outcome, and Repair Integrity After Arthroscopic Rotator Cuff Repair	Duplicate study (same as AAOSID 12773)
Mazzocca, Ad 2016	The Effect of Early Range of Motion on Quality of Life, Clinical Outcome, and Repair Integrity After Arthroscopic Rotator Cuff Repair	Not best available evidence
McConville, O. R. 1999	Partial-thickness tears of the rotator cuff: evaluation and management	literature review; not a study
McCormick, F. 2013	An assessment of the quality of rotator cuff randomized controlled trials: utilizing the Jadad score and CONSORT criteria	Systematic review
McCormick, F. 2014	Single-row, double-row, and transosseous equivalent techniques for isolated supraspinatus tendon tears with minimal atrophy: A retrospective comparative outcome and radiographic analysis at minimum 2-year followup	*not best available
McCreesh, K. M. 2015	Acromiohumeral distance measurement in rotator cuff tendinopathy: is there a reliable, clinically applicable method? A systematic review	Systematic review
McDermott, J. D. 2015	Techniques in arthroscopic rotator cuff repair: Single-row repair: The preferred approach	Background article
McDevitt, A. 2015	Regional interdependence and manual therapy directed at the thoracic spine	narrative review
McElvany, M. D. 2015	Rotator cuff repair: published evidence on factors associated with repair integrity and clinical outcome	Systematic review
McGarvey, C. 2016	Diagnosis of rotator cuff tears using 3-Tesla MRI versus 3-Tesla MRA: a systematic review and meta-analysis	Systematic Review
McGrath, J. P. 2016	The effect of concomitant glenohumeral joint capsule release during rotator cuff repair-a comparative study	repeat article

Author	Article Title	Reason for Exclusion
McGrath, J. P. 2016	The effect of concomitant glenohumeral joint capsule release during rotator cuff repair--a comparative study	Not best available evidence
McHardy, A. 2008	Chiropractic Treatment of Upper Extremity Conditions: A Systematic Review	Systematic review
McInerney, J. J. 2003	Randomised controlled trial of single, subacromial injection of methylprednisolone in patients with persistent, post-traumatic impingement of the shoulder	Not best available evidence
McIntyre, K. 2016	Evidence-based conservative rehabilitation for posterior glenohumeral instability: A systematic review	systematic review
McIntyre, L. F. 2006	Comparison of suture welding and hand-tied knots in mini-open rotator cuff repair	Incorrect patient population (not exclusive to primary surgery)
McMahon, P. J. 2014	What is the prevalence of senior-athlete rotator cuff injuries and are they associated with pain and dysfunction?	No sensitivity/specificity, LR, or ROC curve values
McRae, S. 2011	Relationship between self-reported shoulder function/quality of life, body mass index, and other contributing factors in patients awaiting rotator cuff repair surgery	Not relevant to PICO; pre-op results only
Meeks, B. D. 2017	Patient Satisfaction After Biceps Tenotomy	Incorrect patient population (Not exclusive to full-thickness tears for prognostic patients)
Meena, S. 2015	Arthroscopic rotator cuff repair with and without acromioplasty for rotator cuff tear: A meta-analysis of randomized controlled trial	meta analysis
Meister, K. 2004	The posterior impingement sign: diagnosis of rotator cuff and posterior labral tears secondary to internal impingement in overhand athletes	Not best available evidence (moderate quality)
Meister, K. 2004	MR arthrography of partial thickness tears of the undersurface of the rotator cuff: an arthroscopic correlation	*Not best available (moderate quality)
Melillo, A. S. 1997	Massive rotator cuff tears: debridement versus repair	Review
Melis, B. 2012	Glenoid loosening and failure in anatomical total shoulder arthroplasty: is revision with a reverse shoulder arthroplasty a reliable option?	no massive, irreparable RC for PICO 10
Melis, B. 2010	Natural history of fatty infiltration and atrophy of the supraspinatus muscle in rotator cuff tears	Natural History

Author	Article Title	Reason for Exclusion
Melis, B. 2011	The teres minor muscle in rotator cuff tendon tears	no comparison, just measuring TM involvement in RC tears, not diagnostic testing
Melis, B. 2010	Natural history of infraspinatus fatty infiltration in rotator cuff tears	Natural History
Mellado, J. M. 2006	MR assessment of the repaired rotator cuff: prevalence, size, location, and clinical relevance of tendon rerupture	not a relevant study or review
Mendias, C. L. 2015	Reduced muscle fiber force production and disrupted myofibril architecture in patients with chronic rotator cuff tears	less than 20 pts total; no comparison group
Mengiardi, B. 2004	Frozen shoulder: MR arthrographic findings	Very low quality
Merivirta, R. 2013	Postoperative fentanyl patch versus subacromial bupivacaine infusion in arthroscopic shoulder surgery	repeat article
Merl, T. 1999	Results of a prospective multicenter study for evaluation of the diagnostic quality of an open whole-body low-field MRI unit. A comparison with high-field MRI measured by the applicable gold standard	not testing for RC tears
Merolla, G. 2013	Ultrasound-guided subacromial injections of sodium hyaluronate for the management of rotator cuff tendinopathy: A prospective comparative study with rehabilitation therapy	Not best available evidence
Merolla, G. 2015	Co-analgesic therapy for arthroscopic supraspinatus tendon repair pain using a dietary supplement containing Boswellia serrata and Curcuma longa: a prospective randomized placebo-controlled study	Imperfect comparator (not among specified interventions)
Merolla, G. 2011	Efficacy of Hylan G-F 20 versus 6-methylprednisolone acetate in painful shoulder osteoarthritis: a retrospective controlled trial	Not best available evidence
Merolla, G. 2011	Efficacy of Hylan G-F 20 versus 6-methylprednisolone acetate in painful shoulder osteoarthritis: a retrospective controlled trial	Not best available evidence for hyaluronic acid Groups are not compared to each other (baseline vs. post-intervention); PEER unable to extract additional outcomes
Merolla, G. 2018	Grammont humeral design versus onlay curved-stem reverse shoulder arthroplasty: comparison of clinical and radiographic outcomes with minimum 2-year follow-up	Not best available evidence

Author	Article Title	Reason for Exclusion
Messina, C. 2015	Ultrasound-guided interventional procedures around the shoulder	Background article
Michaleff, Z. A. 2013	PEDro systematic review update: the effectiveness of physiotherapy exercises in subacromial impingement syndrome	Systematic review
Michener, L. A. 2004	Effectiveness of rehabilitation for patients with subacromial impingement syndrome: A systematic review	Systematic review
Michener, L. A. 2009	Reliability and Diagnostic Accuracy of 5 Physical Examination Tests and Combination of Tests for Subacromial Impingement	only 7/55 pts had RCT
Middleton, W. D. 2004	Sonography of the rotator cuff: analysis of interobserver variability	No sensitivity/specificity, LR, or ROC curve values
Mifune, Y. 2015	Application of Pain Quantitative Analysis Device for Assessment of Postoperative Pain after Arthroscopic Rotator Cuff Repair	Not best available evidence
Mihata, T. 2011	Functional and structural outcomes of single-row versus double-row versus combined double-row and suture-bridge repair for rotator cuff tears	*not best available
Milano, G. 2013	Efficacy of marrow-stimulating technique in arthroscopic rotator cuff repair: a prospective randomized study	same as A12605
Milena, C. 2017	CT arthrography of adhesive capsulitis of the shoulder: Are MR signs applicable?	No sensitivity/specificity, LR, or ROC curve values reported for patients with RC tears/lesions
Millar, N. L. 2009	Open versus two forms of arthroscopic rotator cuff repair	*not best available
Millar, N. L. 2009	Open versus two forms of arthroscopic rotator cuff repair	Same as AAOS ID 3235
Miller, C. A. 2008	The validity of the lag signs in diagnosing full-thickness tears of the rotator cuff: a preliminary investigation	*Not best available (moderate quality)
Miller, D. 2008	A 'one-stop clinic' for the diagnosis and management of rotator cuff pathology: Getting the right diagnosis first time	*Not best available (moderate quality)
Miller, J. E. 2016	Association of Strength Measurement with Rotator Cuff Tear in Patients with Shoulder Pain: The Rotator Cuff Outcomes Workgroup Study	Does not address prognostic question of interest
Millett, P. J. 2009	Outcomes of full-thickness articular cartilage injuries of the shoulder treated with microfracture	patients with RC FTT were excluded in the study

Author	Article Title	Reason for Exclusion
Millett, P. J. 2014	Clinical and structural outcomes after arthroscopic single-row versus double-row rotator cuff repair: a systematic review and meta-analysis of level I randomized clinical trials	Systematic review
Milosavljevic, J. 2005	Ultrasonography of the rotator cuff: a comparison with arthroscopy in one-hundred-and-ninety consecutive cases	*Not best available (moderate quality)
Miniaci, A. 2002	Magnetic resonance imaging of the shoulder in asymptomatic professional baseball pitchers	less than 20 pts total
Minkalis, A. L. 2017	A systematic review of thrust manipulation for non-surgical shoulder conditions	systematic review
Misamore, G. W. 1995	Repair of the rotator cuff: A comparison of results in two populations of patients	N/A
Miyazaki, A. N. 2011	Evaluation of the Results from Reoperations on Patients with Rotator Cuff Lesions	inclusion of all secondary surgery pts
Miyazaki, A. N. 2017	Evaluation of the functional results after rotator cuff arthroscopic repair with the suture bridge technique	no comparison group
Modi, C. S. 2013	Accuracy of abduction-external rotation MRA versus standard MRA in the diagnosis of intra-articular shoulder pathology	*Not best available (moderate quality)
Mohamadi, A. 2017	Corticosteroid Injections Give Small and Transient Pain Relief in Rotator Cuff Tendinosis: A Meta-analysis	Meta-analysis
Mohamadi, A. 2017	Corticosteroid Injections Give Small and Transient Pain Relief in Rotator Cuff Tendinosis: A Meta-analysis	Meta-analysis
Mohana-Borges, A. V. R. 2003	Superior Labral Anteroposterior Tear: Classification and Diagnosis on MRI and MRArthrography	literature review; no original data
Mohtadi, Ng 2008	A randomized clinical trial comparing open to arthroscopic acromioplasty with mini-open rotator cuff repair for full-thickness rotator cuff tears: disease-specific quality of life outcome at an average 2-year follow-up	same as A3420
Mollon, B. 2016	Subsequent Shoulder Surgery After Isolated Arthroscopic SLAP Repair	Not best available evidence
Momenzadeh, O. R. 2015	Assessment of correlation between MRI and arthroscopic pathologic findings in the shoulder joint	*Not best available (moderate quality)
Monseau, A. J. 2013	Common Injections in Musculoskeletal Medicine	literature review
Montgomery, S. R. 2011	Biologic augmentation of rotator cuff repair	Background article
Montgomery, T. J. 1994	Management of rotator cuff tears: A comparison of arthroscopic debridement and surgical repair	*not best available



Author	Article Title	Reason for Exclusion
Montgomery, Tj 1994	Management of rotator cuff tears: a comparison of arthroscopic debridement and surgical repair	Imperfect comparison group
Monu, J. U. 1994	Isolated subacromial bursal fluid on MRI of the shoulder in symptomatic patients: correlation with arthroscopic findings	*Not best available (low quality)
Monu, J. U. V. 1994	Isolated subacromial bursal fluid on MRI of the shoulder in symptomatic patients: Correlation with arthroscopic findings	less than 10 pts had tears
Moore, D. R. 2006	Allograft reconstruction for massive, irreparable rotator cuff tears	Retrospective case series
Moosmayer, S. 2014	Tendon repair compared with physiotherapy in the treatment of rotator cuff tears: a randomized controlled study in 103 cases with a five-year follow-up	same as A12551
Moosmayer, S. 2010	Comparison between surgery and physiotherapy in the treatment of small and medium-sized tears of the rotator cuff: A randomised controlled study of 103 patients with one-year follow-up	same as A12489
Moosmayer, S. 2005	Diagnostic ultrasound of the shoulder - A method for experts only? Results from an orthopedic surgeon with relative inexperience compared to operative findings	*Not best available (moderate quality)
Moosmayer, S. 2013	The natural history of asymptomatic rotator cuff tears: a three-year follow-up of fifty cases	Natural History
Moraes, V. Y. 2014	Platelet-rich therapies for musculoskeletal soft tissue injuries	Systematic review
Moroder, P. 2016	Short to mid-term results of stemless reverse shoulder arthroplasty in a selected patient population compared to a matched control group with stem	Not applicable to PICO 10; imperfect comparison
Morris, B. J. 2016	Obesity Has Minimal Impact on Short-Term Functional Scores After Reverse Shoulder Arthroplasty for Rotator Cuff Tear Arthropathy	pts have arthropathy, thus no PICO 8, no irreparable massive tears, no PICO 11, no comparison
Morris, B. J. 2015	Preoperative opioid use and outcomes after reverse shoulder arthroplasty	No indication of if pts have FTT RC tear
Morris, D. 2013	The clinical effects of Kinesio® Tex taping: A systematic review	Systematic review
Morrison, D. S. 1990	The use of magnetic resonance imaging in the diagnosis of rotator cuff tears	*Not best available (moderate quality)

Author	Article Title	Reason for Exclusion
Morse, K. 2008	Arthroscopic versus mini-open rotator cuff repair: a comprehensive review and meta-analysis	Meta-analysis
Morse, K. 2008	Arthroscopic versus mini-open rotator cuff repair: A comprehensive review and meta-analysis	Meta analysis
Mostafavifar, M. 2013	A systematic review of the effectiveness of kinesio taping for musculoskeletal injury	Systematic review
Motamedi, A. R. 2002	Accuracy of magnetic resonance imaging in determining the presence and size of recurrent rotator cuff tears	*Not best available (low quality)
Motycka, T. 2001	Results of open repair of the rotator cuff - A long-term review of 79 shoulders	Retrospective case series
Motycka, T. 2004	Comparison of debridement versus suture in large rotator cuff tears: long-term study of 64 shoulders	*not best available
Moursy, M. 2009	Latissimus dorsi tendon transfer for irreparable rotator cuff tears: a modified technique to improve tendon transfer integrity	Not applicable to PICO 10; pts w/ arthropathy
Mouzopoulos, G. 2007	Extracorporeal shock wave treatment for shoulder calcific tendonitis: a systematic review	systematic review
Mukovozov, I. 2013	Time to surgery in acute rotator cufftear: A systematic review	systematic review
Mulieri, P. 2010	Reverse shoulder arthroplasty for the treatment of irreparable rotator cuff tear without glenohumeral arthritis	comparison groups are primary vs. secondary surgery; same technique used for both groups
Muller, A. M. 2017	Influence of patient and diagnostic parameters on reported retear rates after arthroscopic rotator cuff repair	meta-analysis
Mulligan, E. P. 2012	Factors that impact rehabilitation strategies after rotator cuff repair	Narrative review
Munro, W. 2009	The validity and accuracy of clinical tests used to detect labral pathology of the shoulder--a systematic review	systematic review
Murphy, R. J. 2010	Shoulder pain	Systematic review
Murrell, G. A. C. 2001	Diagnosis of rotator cuff tears	all aaos reviews exclude meeting abstracts, historical articles, editorials, letters, and commentaries. This article is published as a letter describing results of 2 studies the authors performed, without a full description of the methodology that would be found in a full

Author	Article Title	Reason for Exclusion
		formal publication, and therefore the study must be excluded. If we could find the complete publications of the two individual studies described in this letter, then we could include them, but the bib makes no mention of them
Mutlu, H. 2004	Shoulder MR arthrography guided by CT fluoroscopy	Does not address diagnostic question of interest
Myer, C. A. 2013	A user's guide to performance of the best shoulder physical examination tests	Background article
Myers, T. H. 2005	The resisted supination external rotation test: a new test for the diagnosis of superior labral anterior posterior lesions	Not best available evidence
N. Sanchis M 2014	The role of central sensitization in shoulder pain: A systematic literature review	Systematic review
Nagoshi, M. 2000	Hemodialysis-related subacromial lesion: Diagnostic imaging and minimally invasive treatment	*Not best available (moderate quality)
Naimark, M. 2016	Clinical, Radiographic, and Surgical Presentation of Subscapularis Tendon Tears: A Retrospective Analysis of 139 Patients	*Not best available (low quality)
Naimark, M. 2016	Clinical, Radiographic, and Surgical Presentation of Subscapularis Tendon Tears: A Retrospective Analysis of 139 Patients	Not best available evidence
Nakagaki, K. 1995	Function of supraspinatus muscle with torn cuff evaluated by magnetic resonance imaging	Does not address diagnostic question of interest
Nakamura, H. 2016	Factors Affecting Clinical Outcome in Patients With Structural Failure After Arthroscopic Rotator Cuff Repair	N/A
Nakamura, H. 2016	Factors Affecting Clinical Outcome in Patients With Structural Failure After Arthroscopic Rotator Cuff Repair	Not applicable to PICO 8; no multivariate analysis
Nalysnyk, L. 2013	OnabotulinumtoxinA muscle injection patterns in adult spasticity: A systematic literature review	Systematic review
Nam, S. C. 2008	Functional outcome of arthroscopic repair with concomitant manipulation in rotator cuff tears with stiff shoulder	not all patients had stiff shoulder; patients differ at baseline
Namdari, S. 2014	Factors affecting outcome after structural failure of repaired rotator cuff tears	Not best available evidence
Namdari, S. 2010	Range of motion limitation after rotator cuff repair	no comparison group

Author	Article Title	Reason for Exclusion
Namdari, S. 2017	Randomized controlled trial of interscalene block compared with injectable liposomal bupivacaine in shoulder arthroplasty	Not best available evidence
Namdari, S. 2012	Latissimus dorsi tendon transfer for irreparable rotator cuff tears: a systematic review	Systematic Review
Nanda, R. 2008	An assessment of the inter examiner reliability of clinical tests for subacromial impingement and rotator cuff integrity	Does not address diagnostic question of interest
Naqvi, G. A. 2009	Accuracy of ultrasonography and magnetic resonance imaging for detection of full thickness rotator cuff tears	*Not best available (moderate quality)
Narasimhan, R. 2016	Prevalence of subscapularis tears and accuracy of shoulder ultrasound in pre-operative diagnosis	*Not best available (low quality)
Narasimhan, R. 2016	Prevalence of subscapularis tears and accuracy of shoulder ultrasound in pre-operative diagnosis	Not best available evidence
Nascimento, A. T. 2017	Magnetic resonance imaging without contrast as a diagnostic method for partial injury of the long head of the biceps tendon	*Not best available (low quality)
Neal, J. M. 2003	Suprascapular nerve block prolongs analgesia after nonarthroscopic shoulder surgery but does not improve outcome	Letter
Neelapala, Y. V. R. 2016	Effect of Mulligan's posterolateral glide on shoulder rotator strength, scapular upward rotation in shoulder pain subjects - A randomized controlled trial	pts did not undergo RC repair
Neumann, J. A. 2017	Interposition Dermal Matrix Xenografts: A Successful Alternative to Traditional Treatment of Massive Rotator Cuff Tears	Not relevant to PICO's;
Newman, J. S. 1994	Detection of soft-tissue hyperemia: value of power Doppler sonography	one group < 10 pts
Ng, A. W. 2013	Comparison of ultrasound versus fluoroscopic guided rotator cuff interval approach for MR arthrography	not a relevant study or review
Ngomo, S. 2015	Alterations in central motor representation increase over time in individuals with rotator cuff tendinopathy	not a relevant study or review
Nho, S. J. 2009	Prospective analysis of arthroscopic rotator cuff repair: prognostic factors affecting clinical and ultrasound outcome	for tobacco use unclear if 10 patients per group. in total 34 currently or formerly smoked, but current and former are separate variables in the

Author	Article Title	Reason for Exclusion
		model. it is possible that one of the groups has less than 10, but it is impossible to tell because they combine the 2 groups in their sample description section
Nho, S. J. 2007	Systematic review of arthroscopic rotator cuff repair and mini-open rotator cuff repair	Systematic review
Nho, S. J. 2009	Does the Literature Support Double-Row Suture Anchor Fixation for Arthroscopic Rotator Cuff Repair? A Systematic Review Comparing Double-Row and Single-Row Suture Anchor Configuration	Systematic review
Nho, S. J. 2009	Does the literature support double-row suture anchor fixation for arthroscopic rotator cuff repair? A systematic review comparing double-row and single-row suture anchor configuration	Systematic review
Nich, C. 2014	Does partial tear repair of adjacent tendons improve the outcome of supraspinatus tendonfull-thickness tear reinsertion?	*not best available
Nicholas, S. J. 2016	Functional Outcomes After Double-Row Versus Single-Row Rotator Cuff Repair: A Prospective Randomized Trial	Duplicate study (same as AAOSID 12766)
Nicholas, Sj 2016	Functional Outcomes After Double-Row Versus Single-Row Rotator Cuff Repair: a Prospective Randomized Trial	*not best available
Nicholas, Sj 2015	Functional outcomes after double row versus single row rotator cuff repair: A prospective randomized trial	SAME AS A257
Nikolaidou, O. 2017	Rehabilitation after Rotator Cuff Repair	Narrative review
Nisar, A. 2008	Subacromial bursa block is an effective alternative to interscalene block for postoperative pain control after arthroscopic subacromial decompression: A randomized trial	Not best available evidence
Noel, E. 2009	Efficacy and safety of Hylan G-F 20 in shoulder osteoarthritis with an intact rotator cuff. Open-label prospective multicenter study	Imperfect comparison group
Norenberg, D. 2017	Diagnostic performance of susceptibility-weighted magnetic resonance imaging for the assessment of sub-coracoacromial spurs causing subacromial impingement syndrome	not testing diagnostic ability for tears

Author	Article Title	Reason for Exclusion
Nove-Josserand, L. 2017	Ten-year clinical and anatomic follow-up after repair of anterosuperior rotator cuff tears: Influence of the subscapularis	not a diagnostic study
Nove-Josserand, L. 2009	Results of latissimus dorsi tendon transfer for irreparable cuff tears	same technique applied to all pts
Nove-Josserand, L. 2015	Open side-to-side repair for non-repairable tendon-to-bone rotator cuff tear. Clinical and anatomic outcome at a mean 5 years' follow-up	not a relevant study or review
Nwachukwu, B. U. 2015	Cost-effectiveness analyses in orthopaedic sports medicine: a systematic review	Systematic review
Obaid, H. 2010	Cell therapy in tendon disorders: what is the current evidence?	Systematic review
O'Connor, P. J. 2005	Interobserver variation in sonography of the painful shoulder	No sensitivity/specificity, LR, or ROC curve values
Ogilvie-Harris, D. J. 1993	Arthroscopic debridement versus open repair for rotator cuff tears. A prospective cohort study	Duplicate study (same as AAOSID 12844)
Ogilvie-Harris, Dj 1993	Arthroscopic debridement versus open repair for rotator cuff tears. A prospective cohort study	Duplicate article (same as AAOSID 12844)
Ogilvie-Harris, Dj 1993	Arthroscopic debridement versus open repair for rotator cuff tears. A prospective cohort study	*not best available
Oh, D. K. 2009	Comparison of indirect isotropic MR arthrography and conventional MR arthrography of labral lesions and rotator cuff tears: a prospective study	*Not best available (moderate quality)
Oh, J. H. 2010	Effectiveness of multidetector computed tomography arthrography for the diagnosis of shoulder pathology: comparison with magnetic resonance imaging with arthroscopic correlation	*Not best available (moderate quality)
Oh, J. H. 2009	Prognostic factors affecting anatomic outcome of rotator cuff repair and correlation with functional outcome	Not applicable to PICO 8; no multivariate analysis data
Oh, J. H. 2010	Effect of age on functional and structural outcome after rotator cuff repair	Not applicable to PICO 8; no multivariate analysis
Oh, J. H. 2008	Moderate preoperative shoulder stiffness does not alter the clinical outcome of rotator cuff repair with arthroscopic release and manipulation	Not applicable to PICO 8; only univariate analysis
Oh, J. H. 2017	Outcomes of Rotator Cuff Repair in Patients with Comorbid Disability in the Extremities	less than 20 pts total; no comparison group
Oh, J. H. 2016	Comparison of Treatments for Superior Labrum-Biceps Complex Lesions With Concomitant Rotator Cuff Repair: A Prospective, Randomized,	concomitant vs. concomitant vs. concomitant

Author	Article Title	Reason for Exclusion
	Comparative Analysis of Debridement, Biceps Tenotomy, and Biceps Tenodesis	
Oh, J. H. 2012	Clinical features of partial anterior bursal-sided supraspinatus tendon (PABST) lesions	not a relevant study or review
Oh, J. H. 2010	Isokinetic muscle performance test can predict the status of rotator cuff muscle	Does not address diagnostic question of interest
Oh, Jh 2014	Is arthroscopic distal clavicle resection necessary for patients with radiological acromioclavicular joint arthritis and rotator cuff tears? A prospective randomized comparative study	repeat article
Oh, Jh 2016	Comparison of Treatments for Superior Labrum-Biceps Complex Lesions with Concomitant Rotator Cuff Repair: A Prospective, Randomized, Comparative Analysis of Debridement, Biceps Tenotomy, and Biceps Tenodesis	PTTs and FTTs not stratified in results
Oh, L. S. 2007	Indications for rotator cuff repair: a systematic review	Systematic Review
O'Holleran, J. D. 2005	Determinants of patient satisfaction with outcome after rotator cuff surgery	N/A
Okoroha, K. R. 2017	Characterization of Rotator Cuff Tears: Ultrasound Versus Magnetic Resonance Imaging	No likelihood ratios, sensitivity/specificity, or ROC curve
Oliva, F. 2015	I.S.Mu.L.T - Rotator Cuff Tears Guidelines	Narrative Review
Olive, R. J., Jr. 1992	Ultrasonography of rotator cuff tears	*Not best available (moderate quality)
Olsewski, J. M. 1994	Arthroscopic subacromial decompression and rotator cuff debridement for stage II and stage III impingement	Not best available evidence
Omoumi, P. 2012	Evaluation of rotator cuff tendon tears: comparison of multidetector CT arthrography and 1.5-T MR arthrography	*Not best available (moderate quality)
Onat, S. 2016	Effectiveness of Kinesiotaping and Subacromial Corticosteroid Injection in Shoulder Impingement Syndrome	Very low quality
Ongbumrungphan, W. 2015	The Effect of Radiographic Beam Angle on Acromiohumeral Interval: 3D-CT Analytic Study	*Not best available (low quality)
Ono, Y. 2017	Graft Augmentation Versus Bridging for Large to Massive Rotator Cuff Tears: A Systematic Review	Systematic review
Ono, Y. 2017	Graft Augmentation Versus Bridging for Large to Massive Rotator Cuff Tears: A Systematic Review	Systematic Review

Author	Article Title	Reason for Exclusion
Ono, Y. 2016	Can Grafts Provide Superior Tendon Healing and Clinical Outcomes After Rotator Cuff Repairs?: A Meta-analysis	Systematic Review
Ono, Y. 2016	Arthroscopic Repair of Articular Surface Partial-Thickness Rotator Cuff Tears: Transtendon Technique versus Repair after Completion of the Tear-A Meta-Analysis	Systematic Review
Orlandi, D. 2017	Rotator Cuff Calcific Tendinopathy: Randomized Comparison of US-guided Percutaneous Treatments by Using One or Two Needles	Not best available evidence
Ortega-Castillo, M. 2016	Effectiveness of the eccentric exercise therapy in physically active adults with symptomatic shoulder impingement or lateral epicondylar tendinopathy: A systematic review	Systematic review
Orth, T. 2017	Current Concepts on the Genetic Factors in Rotator Cuff Pathology and Future Implications for Sports Physical Therapists	Background article
Ortmaier, R. 2017	Reverse shoulder arthroplasty combined with latissimus dorsi transfer: A systemic review	Systematic review
Osbaahr, D. C. 2002	The effect of continuous cryotherapy on glenohumeral joint and subacromial space temperatures in the postoperative shoulder	non-relevant outcomes
Osbaahr, D. C. 2006	The rotator cuff functional index	*Not best available (moderate quality)
Osbaahr, D. C. 2006	The rotator cuff functional index	*Not best available (moderate quality)
Osbaahr, Dc 2002	The effect of continuous cryotherapy on glenohumeral joint and subacromial space temperatures in the postoperative shoulder	Not best available evidence
Osteras H. 2009	Dose-response effects of graded therapeutic exercises in patients with long-standing subacromial pain	patients did not undergo RC repair
Osti, L 2013	Microfractures at the rotator cuff footprint: a randomised controlled study	Excluded at final meeting
Osti, L. 2017	Transtendon repair in partial articular supraspinatus tendon tear	Systematic review
Osti, L. 2015	Clinical evidence in the treatment of rotator cuff tears with hyaluronic acid	Systematic review
Osti, L. 2017	Apoptosis and rotator cuff tears: scientific evidence from basic science to clinical findings	narrative review



Author	Article Title	Reason for Exclusion
Osti, L. 2013	Microfractures at the rotator cuff footprint: a randomised controlled study	same as A12500
Ostor, A. J. 2013	Validation of clinical examination versus magnetic resonance imaging and arthroscopy for the detection of rotator cuff lesions	*Not best available (moderate quality)
Ostor, A. J. 2013	Validation of clinical examination versus magnetic resonance imaging and arthroscopy for the detection of rotator cuff lesions	*Not best available (moderate quality)
Ottenheim, R. P. 2015	Ultrasound imaging for tailored treatment of patients with acute shoulder pain	no control group
Ottenheim, R. P. 2010	Accuracy of diagnostic ultrasound in patients with suspected subacromial disorders: a systematic review and meta-analysis	Systematic review/meta analysis
Oudelaar, B. W. 2015	Smoking and morphology of calcific deposits affect the outcome of needle aspiration of calcific deposits (NACD) for calcific tendinitis of the rotator cuff	Incorrect patient population (Not exclusive to full-thickness tears for prognostic patients)
Ouyang, H. 2013	Plate versus intramedullary nail fixation in the treatment of humeral shaft fractures: An updated meta-analysis	Meta-analysis
Owen, R. S. 1993	Shoulder after surgery: MR imaging with surgical validation	Does not address diagnostic question of interest
Owens, B. D. 2015	Arthroscopic Versus Open Stabilization for Anterior Shoulder Subluxations	arthroscopic group 9 pts
Owens, B. D. 2015	Risk factors for surgical complications in rotator cuff repair in a veteran population	Not indicative of exclusivity to full-thickness tears for prognostic patients
Paavola, M. 2017	Finnish Subacromial Impingement Arthroscopy Controlled Trial (FIMPACT): A protocol for a randomised trial comparing arthroscopic subacromial decompression and diagnostic arthroscopy (placebo control), with an exercise therapy control, in the treatment of shoulder impingement syndrome	no data; protocol
Paavolainen, P. 1994	Ultrasonography and arthrography in the diagnosis of tears of the rotator cuff	*Not best available (moderate quality)
Page, M. J. 2016	Manual therapy and exercise for rotator cuff disease	Systematic review
Page, M. J. 2016	Manual therapy and exercise for rotator cuff disease	Systematic review
Page, M. J. 2016	Electrotherapy modalities for rotator cuff disease	Systematic review
Page, M. J. 2015	Core domain and outcome measurement sets for shoulder pain trials are needed: Systematic review of physical therapy trials	Systematic review

Author	Article Title	Reason for Exclusion
Palmer, K. 2000	The southampton examination schedule for the diagnosis of musculoskeletal disorders of the upper limb	no tear assessment
Palmer, W. E. 1993	Rotator cuff: evaluation with fat-suppressed MR arthrography	*Not best available (moderate quality)
Pandey, V. 2016	Does application of moderately concentrated platelet-rich plasma improve clinical and structural outcome after arthroscopic repair of medium-sized to large rotator cuff tear? A randomized controlled trial	Duplicate article; same as AAOS ID 12513
Pandey, V. 2016	Does application of moderately concentrated platelet-rich plasma improve clinical and structural outcome after arthroscopic repair of medium-sized to large rotator cuff tear? A randomized controlled trial	same as A12513
Panella, A. 2016	Single-row and transosseous sutures for supraspinatus tendon tears: a retrospective comparative clinical and strength outcome at 2-year follow-up	*not best available
Paoloni, J. A. 2005	Topical glyceryl trinitrate application in the treatment of chronic supraspinatus tendinopathy: A randomized, double-blinded, placebo-controlled clinical trial	pts not scheduled or did not have surgery
Papadonikolakis, A. 2014	Metal-Backed Glenoid Components Have a Higher Rate of Failure and Fail by Different Modes in Comparison with All-Polyethylene Components: A Systematic Review	Systematic review
Papadonikolakis, A. 2014	Metal-backed glenoid components have a higher rate of failure and fail by different modes in comparison with all-polyethylene components: A systematic review	Systematic review
Papadonikolakis, A. 2011	Published evidence relevant to the diagnosis of impingement syndrome of the shoulder	Systematic review
Papalia, R. 2011	Results of surgical management of symptomatic shoulders with partial thickness tears of the rotator cuff	Systematic Review
Papalia, R. 2012	Shoulder stiffness and rotator cuff repair	Systematic review
Papalia, R. 2013	Augmentation techniques for rotator cuff repair	Systematic review
Papalia, R. 2015	Rugby and Shoulder Trauma: A Systematic Review	Systematic review
Papatheodorou, A. 2006	US of the shoulder: rotator cuff and non-rotator cuff disorders	Background article

Author	Article Title	Reason for Exclusion
Park, H. J. 2015	Evaluation of shoulder pathology: three-dimensional enhanced T1 high-resolution isotropic volume excitation MR vs two-dimensional fast spin echo T2 fat saturation MR	Same as AAOS ID 1180
Park, H. J. 2015	The usefulness of the three-dimensional enhanced T1 high-resolution isotropic volume excitation MR in the evaluation of shoulder pathology: comparison with two-dimensional enhanced T1 fat saturation MR	inconsistent, multiple reference standards
Park, J. S. 2017	A Prospective Randomized Study Comparing the Interference Screw and Suture Anchor Techniques for Biceps Tenodesis	Incorrect patient population (Not exclusive to full-thickness tears for prognostic patients)
Park, J. S. 2017	A Prospective Randomized Study Comparing the Interference Screw and Suture Anchor Techniques for Biceps Tenodesis	Incorrect patient population (not exclusive to full-thickness tears)
Park, J. Y. 2014	Effect of capsular release in the treatment of shoulder stiffness concomitant with rotator cuff repair: diabetes as a predisposing factor associated with treatment outcome	Not best available evidence
Park, J. Y. 2013	How to assess scapular dyskinesis precisely: 3-dimensional wing computer tomography-a new diagnostic modality	Does not address diagnostic question of interest
Park, J. Y. 2014	Revisit to scapular dyskinesis: Three-dimensional wing computed tomography in prone position	Does not address diagnostic question of interest
Park, J. Y. 2007	The effectiveness of digital infrared thermographic imaging in patients with shoulder impingement syndrome	Natural history *Not best available (low quality)
Park, J. Y. 2002	The efficacy of continuous intrabursal infusion with morphine and bupivacaine for postoperative analgesia after subacromial arthroscopy	Duplicate study (same as AAOSID 12684)
Park, J. Y. 2013	Clinical comparison between double-row and transosseous-equivalent repairs for medium to large size rotator cuff tears	*not best available
Park, J. Y. 2008	Comparison of the clinical outcomes of single- and double-row repairs in rotator cuff tears	*not best available
Park, J. Y. 2010	Blind subacromial injection from the anterolateral approach: The ballooning sign	WRONG PDF
Park, Jy 2002	The efficacy of continuous intrabursal infusion with morphine and bupivacaine for postoperative analgesia after subacromial arthroscopy	Not best available evidence

Author	Article Title	Reason for Exclusion
Park, S. Y. 2014	Comparison of three-dimensional isotropic and conventional MR arthrography with respect to the diagnosis of rotator cuff and labral lesions: focus on isotropic fat-suppressed proton density and VIBE sequences	*Not best available (moderate quality)
Park, Y. E. 2014	Knot impingement after rotator cuff repair: is it real?	*not best available
Park, Yb 2015	Arthroscopic distal clavicle resection in symptomatic acromioclavicular joint arthritis combined with rotator cuff tear: a prospective randomized trial	PTTs and FTTs not stratified in results
Parmar, H. 2002	Magnetic resonance arthrography in recurrent anterior shoulder instability as compared to arthroscopy: a prospective comparative study	All patients had glenoid tears; no negative ref std
Parrish, W. M. 2004	Tumors of the proximal humerus	opinion piece
Parsa, M. 1997	MR imaging of rotator cuff tendon tears: comparison of T2 -weighted gradient-echo and conventional dual-echo sequences	*Not best available
Parsons, B. O. 2010	Does slower rehabilitation after arthroscopic rotator cuff repair lead to long-term stiffness?	Not best available evidence
Pas, H. I. 2017	No evidence for the use of stem cell therapy for tendon disorders: a systematic review	Systematic review
Passaretti, D. 2016	Erratum: Association between alcohol consumption and rotator cuff tear (Acta Orthop, (2016), 87, 2, (165-168), 10.3109/17453674.2015.1119599)	Erratum
Passaretti, D. 2016	Association between alcohol consumption and rotator cuff tear	did not evaluate risk factors for poor outcome after rotator cuff tear. rather was a case control study evaluating risk factors for occurrence of first rotator cuff tear.
Pastora-Bernal, J. M. 2017	Effectiveness of telerehabilitation programme following surgery in shoulder impingement syndrome (SIS): Study protocol for a randomized controlled non-inferiority trial	study proposal; no data
Patten, R. M. 1994	Diagnostic performance of magnetic resonance imaging for the diagnosis of rotator cuff tears using supplemental images in the oblique sagittal plane	Very low quality
Patzer, T. 2011	Is there an association between SLAP lesions and biceps pulley lesions?	not relevant; prevalence study
Paulos, L. E. 1994	The acromion-splitting approach for large and massive rotator cuff tears	Very low quality

Author	Article Title	Reason for Exclusion
Pauly, S. 2010	Single versus double-row repair of the rotator cuff: does double-row repair with improved anatomical and biomechanical characteristics lead to better clinical outcome?	Systematic Review
Pauly, S. 2010	Single versus double-row repair of the rotator cuff	Systematic Review
Pauly, S. 2009	Prevalence of concomitant intraarticular lesions in patients treated operatively for high-grade acromioclavicular joint separations	Very low quality
Pauly, S. 2015	Do patient age and sex influence tendon cell biology and clinical/radiographic outcomes after rotator cuff repair?	same risks factors assessed in a high quality study
Pavic, R. 2013	Diagnostic value of US, MR and MR arthrography in shoulder instability	*Not best available (moderate quality)
Payne, L. Z. 1993	The results of arthroscopic debridement of glenoid labral tears based on tear location	Incorrect patient population (<10 patients/ total group)
Pearsall, A. W. th 2007	The results of arthroscopic versus mini-open repair for rotator cuff tears at mid-term follow-up	*not best available
Pearsall, Iv A. W. 2003	Radiographic findings associated with symptomatic rotator cuff tears	not compared to any ref standard
Pecora, J. O. 2015	Prognostic factors for clinical outcomes after rotator cuff repair	Incorrect patient population (Not exclusive to full-thickness tears for prognostic patients)
Pedowitz, R. A. 2011	The "50% rule" in arthroscopic and orthopaedic surgery	Systematic review
Peek, A. L. 2015	Thoracic manual therapy in the management of non-specific shoulder pain: A systematic review	Systematic review
Peh, W. C. 1994	The role of computerized tomography in shoulder arthrography	*Not best available (low quality)
Peh, W. C. G. 1994	The role of computerization tomography in shoulder arthrography	*Not best available (moderate quality)
Pekyavas, N. O. 2016	Short-term effects of high-intensity laser therapy, manual therapy, and Kinesio taping in patients with subacromial impingement syndrome	pts have SAIS, not undergone surgery
Peltz, C. D. 2014	Associations among shoulder strength, glenohumeral joint motion, and clinical outcome after rotator cuff repair	Not relevant to PICO; GHJ motion
Penning, L. I. 2016	Empty can and drop arm tests for cuff rupture : Improved specificity after subacromial injection	*Not best available (moderate quality)
Pennington, W. T. 2010	Comparative analysis of single-row versus double-row repair of rotator cuff tears	*not best available
Pensak, M. 2010	Open Versus Arthroscopic Distal Clavicle Resection	Systematic review

Author	Article Title	Reason for Exclusion
Pensak, M. 2010	Open versus arthroscopic distal clavicle resection	Systematic review
Penteado, S. C. 2008	Diagnosis of degenerative lesions of supraspinatus rotator cuff tendons by Fourier transform-Raman spectroscopy	no diagnosis of tear in study
Perez, J. R. 2018	Rotator cuff tears in the pediatric population: Comparing findings on arthroscopic evaluation to pre-operative magnetic resonance imaging	Very low quality
Perez-Palomares, S. 2009	Contributions of myofascial pain in diagnosis and treatment of shoulder pain. A randomized control trial	Not relevant to PICO's;
Perser, K. 2011	Meta-analysis of Clinical and Radiographic Outcomes After Arthroscopic Single-Row Versus Double-Row Rotator Cuff Repair	Meta-analysis
Petri, M. 2016	Non-Operative Management of Rotator Cuff Tears	Background article
Petrillo, S. 2017	Reverse shoulder arthroplasty for massive irreparable rotator cuff tears and cuff tear arthropathy: a systematic review	systematic review
Petrillo, S. 2017	Reverse shoulder arthroplasty for massive irreparable rotator cuff tears and cuff tear arthropathy: a systematic review	Systematic review
Pfahler, M. 2006	Hemiarthroplasty versus total shoulder prosthesis: Results of cemented glenoid components	Incorrect patient population
Pfahler, M. 2006	Hemiarthroplasty versus total shoulder prosthesis: results of cemented glenoid components	Not applicable to PICO 11; imperfect comparison
Pham, T. T. 2016	Postoperative pain after arthroscopic versus open rotator cuff repair. A prospective study	*not best available
Phillips, J. C. 2013	Validity of noncontrast magnetic resonance imaging in diagnosing superior labrum anterior-posterior tears	*Not best available (moderate quality)
PiÅ?kin, A. 2013	Subfebrile fever after shoulder arthroscopy: Is it a complication or benign transient situation?	7 pts in one group
Piitulainen, K. 2015	Does adding a 12-month exercise programme to usual care after a rotator cuff repair effect disability and quality of life at 12 months? A randomized controlled trial	Imperfect comparison group (both groups unsupervised)
Piper, C. C. 2018	Operative versus nonoperative treatment for the management of full-thickness rotator cuff tears: a systematic review and meta-analysis	Systematic review
Piper, S. 2016	The effectiveness of soft-tissue therapy for the management of musculoskeletal disorders and injuries of the upper and lower extremities: A	Systematic review

Author	Article Title	Reason for Exclusion
	systematic review by the Ontario Protocol for Traffic Injury management (OPTIMa) collaboration	
Plant, M. J. 1995	Rehabilitation and outcome after total shoulder replacement in rheumatic disease	Not best available evidence
Plate, J. F. 2013	Rotator cuff injuries in professional and recreational athletes	Narrative review
Ponce, B. A. 2014	Rotator cuff crepitus: could Codman really feel a cuff tear?	*Not best available (moderate quality)
Porto Fde, M. 2013	Evaluation of patients undergoing rotator cuff suture with the modified mason-allen technique	same technique applied to all pts
Potter, M. Q. 2014	Psychological distress negatively affects self-assessment of shoulder function in patients with rotator cuff tears	risk factor of behavioral health assessing self-assessed pain and function, not postop surgery (PICO 8)
Poveda-Pagãin, E. J. 2017	Referred Pain Patterns of the Infraspinatus Muscle Elicited by Deep Dry Needling and Manual Palpation	Not best available evidence
Poyhia, T. H. 2005	MRI of rotator cuff muscle atrophy in relation to glenohumeral joint incongruence in brachial plexus birth injury	not a relevant study or review
Prasathaporn, N. 2011	Single-row repair versus double-row repair of full-thickness rotator cuff tears	meta-analysis
Prato, N. 1991	The Leclercq test in diagnosis of tear in the rotator cuff	*Not best available (low quality)
Prestgaard, T. 2015	Ultrasound-guided intra-articular and rotator interval corticosteroid injections in adhesive capsulitis of the shoulder: A double-blind, sham-controlled randomized study	Unable to use data for relevant comparisons
Pribicevic, M. 2010	A systematic review of manipulative therapy for the treatment of shoulder pain	systematic review
Price, A. E. 2007	Botulinum toxin type A as an adjunct to the surgical treatment of the medial rotation deformity of the shoulder in birth injuries of the brachial plexus	N/A
Probyn, L. J. 2007	Recurrent symptoms after shoulder instability repair: Direct MR arthrographic assessment - Correlation with second-look surgical evaluation	Duplicate article (same as AAOSID 3521)
Provencher, M. T. 2013	A prospective analysis of 179 type 2 superior labrum anterior and posterior repairs: outcomes and factors associated with success and failure	same risks factors assessed in a high quality study
Punwar, S. 2014	Pre-operative departmental ultrasound of the rotator cuff: sensitivity and specificity in a regional specialist orthopaedic centre	*Not best available (low quality)

Author	Article Title	Reason for Exclusion
Qiu, W. 2016	Abduction external rotation position in magnetic resonance arthrography for the diagnosis of rotator cuff tears	Retracted study
Qiu, W. 2016	RETRACTED: Abduction external rotation position in magnetic resonance arthrography for the diagnosis of rotator cuff tears.[Retraction in J Orthop Sci. 2017 Jul;22(4):806; PMID: 28701269]	Retracted study
Quinn, S. F. 1995	Rotator cuff tendon tears: evaluation with fat-suppressed MR imaging with arthroscopic correlation in 100 patients	*Not best available (low quality)
Raab, Mg 1996	Early results of continuous passive motion after rotator cuff repair: a prospective, randomized, blinded, controlled study	Not best available evidence
Rabalais, R. D. 2007	Surgical treatment of symptomatic acromioclavicular joint problems: a systematic review	Systematic review
Radnovich, R. 2014	A randomized clinical study of the heated lidocaine/tetracaine patch versus subacromial corticosteroid injection for the treatment of pain associated with shoulder impingement syndrome	Not best available evidence
Rah, U. W. 2012	Subacromial corticosteroid injection on poststroke hemiplegic shoulder pain: A randomized, triple-blind, placebo-controlled trial	Systematic review
Raman, J. 2017	Predictors of outcomes after rotator cuff repair-A meta-analysis	meta analysis
Ramappa, A. 2017	Comparison of Anterior and Posterior Cortico-steroid Injections for Pain Relief and Functional Improvement in Shoulder Impingement Syndrome	Not best available evidence
Ranalletta, M. 2016	Arthroscopic Transtendon Repair of Partial-Thickness Articular-Side Rotator Cuff Tears	no comparison group
Ranalletta, M. 2015	Arthroscopic Removal and Rotator Cuff Repair Without Acromioplasty for the Treatment of Symptomatic Calcifying Tendinitis of the Supraspinatus Tendon	Not relevant to PICO; calcific tendinitis
Ranalletta, M. 2016	Return to Sports After Arthroscopic Treatment of Rotator Cuff Calcifications in Athletes	no comparison group
Randelli, P. 2015	Repair versus shaving of partial-thickness articular-sided tears of the upper subscapularis tendon. A prospective randomized controlled trial	one group < 10 pts
Randelli, P. 2009	Release of growth factors after arthroscopic acromioplasty	Does not address question of interest



Author	Article Title	Reason for Exclusion
Randelli, P. 2015	Revision reverse shoulder arthroplasty in failed shoulder arthroplasties for rotator cuff deficiency	Systematic Review
Randelli, P. 2014	Regenerative medicine in rotator cuff injuries	Narrative review
Randelli, P. 2012	Complications associated with arthroscopic rotator cuff repair: a literature review	Narrative review
Randelli, P. 2017	Advantages of Arthroscopic Rotator Cuff Repair With a Transosseous Suture Technique: A Prospective Randomized Controlled Trial	Duplicate article; same as AAOS ID 57
Ranebo, M. C. 2017	Clinical and structural outcome 22 years after acromioplasty without tendon repair in patients with subacromial pain and cuff tears	no primary cuff repair
Rao, S. E. 2006	Subacromial decompression for shoulder impingement syndrome	Very low quality
Ratcliffe, E. 2014	Is there a relationship between subacromial impingement syndrome and scapular orientation? A systematic review	Systematic review
Rawat, P. 2017	Effect of rotator cuff strengthening as an adjunct to standard care in subjects with adhesive capsulitis: A randomized controlled trial	Incorrect patient population (prior surgery not indicated)
Raymond, A. C. 2013	Magnetic resonance scanning vs axillary radiography in the assessment of glenoid version for osteoarthritis	*Not best available (low quality)
Raynor, M. B. 2016	Utility of features of the patient's history in the diagnosis of atraumatic shoulder pain: a systematic review	Systematic review
Razmjou, H. 2017	Outcome of Expedited Rotator Cuff Surgery in Injured Workers: Determinants of Successful Recovery	no comparison group
Razmjou, H. 2015	Outcome of distal clavicle resection in patients with acromioclavicular joint osteoarthritis and full-thickness rotator cuff tear	Not best available evidence
Razmjou, H. 2016	Effect of arthroscopic rotator cuff surgery in patients with preoperative restricted range of motion	results not stratified by FFTs
Razmjou, H. 2017	The effect of expedited rotator cuff surgery in injured workers: a case-control study	Incorrect patient population (Not exclusive to full-thickness tears for prognostic patients)
Read, J. W. 1998	Shoulder ultrasound: diagnostic accuracy for impingement syndrome, rotator cuff tear, and biceps tendon pathology	*Not best available (moderate quality)

Author	Article Title	Reason for Exclusion
Redondo-Alonso, L. 2014	Relationship between chronic pathologies of the supraspinatus tendon and the long head of the biceps tendon: Systematic review	Systematic review
Redondo-Alonso, L. 2014	Relationship between chronic pathologies of the supraspinatus tendon and the long head of the biceps tendon: systematic review	Systematic Review
Reinus, W. R. 1995	MR diagnosis of rotator cuff tears of the shoulder: value of using T2-weighted fat-saturated images	*Not best available
Reuter, S. 2016	Impact of rotator cuff surgery on postoperative sporting activity	Systematic review
Reynolds, A. 2012	Imaging the injured shoulder	Background article
Rhee, R. B. 2012	MR and CT arthrography of the shoulder	Background article
Rhee, Y. G. 2008	Bridging the gap in immobile massive rotator cuff tears: augmentation using the tenotomized biceps	Not applicable to PICO; imperfect comparison for 10
Rhee, Y. G. 2012	Arthroscopic rotator cuff repair using modified Mason-Allen medial row stitch: knotless versus knot-tying suture bridge technique	Same as AAOSID 2276
Rhee, Y. G. 2017	The outcomes and affecting factors after arthroscopic isolated subscapularis tendon repair	Not applicable to PICO 8; no multivariate analysis
Rhee, Y. G. 2008	Bridging the gap in immobile massive rotator cuff tears: Augmentation using the tenotomized biceps	Very low quality
Rhon, D. I. 2014	One-year outcome of subacromial corticosteroid injection compared with manual physical therapy for the management of the unilateral shoulder impingement syndrome: A pragmatic randomized trial	Not best available evidence
Riboh, J. C. 2014	Early passive motion versus immobilization after arthroscopic rotator cuff repair	meta analysis
Richter, D. L. 2016	Arthroscopic Patch Augmentation for Rotator Cuff Repair	Narrative review
Riente, L 2013	Ultrasound imaging for the rheumatologist XLV. Ultrasound of the shoulder in psoriatic arthritis	*Not best available evidence
Ris, I. 2016	Does a combination of physical training, specific exercises and pain education improve health-related quality of life in patients with chronic neck pain? A randomised control trial with a 4-month follow up	pts did not undergo RC repair
Roberson, T. A. 2016	Predictors of early complications after rotator cuff repair	Incorrect patient population (not exclusive to primary surgical repair)
Roberson, T. A. 2017	Predictors of Postoperative Pain and Narcotic Use after Primary Arthroscopic Rotator Cuff Repair	Not applicable to PICO 8; only 12 week follow-up

Author	Article Title	Reason for Exclusion
Roberts, C. S. 1998	Sonography for the office screening of suspected rotator cuff tears: early experience of the orthopedic surgeon	Not best available evidence (Low quality)
Roberts, C. S. 2001	Diagnostic capabilities of shoulder ultrasonography in the detection of complete and partial rotator cuff tears	*Not best available (low quality)
Roberts, C. S. 2001	Diagnostic capabilities of shoulder ultrasonography in the detection of complete and partial rotator cuff tears	*Not best available (low quality)
Rockwood Jr, C. A. 1995	Debridement of degenerative, irreparable lesions of the rotator cuff	no comparison group
Rockwood, C. A. 1993	Shoulder impingement syndrome: diagnosis, radiographic evaluation, and treatment with a modified Neer acromioplasty	1/2 pts w/RCT, no comparison to other RCT pts
Roddey, Ts 2002	A randomized controlled trial comparing 2 instructional approaches to home exercise instruction following arthroscopic full-thickness rotator cuff repair surgery	Imperfect comparison group (both home programs)
Roddy, E. 2014	Subacromial impingement syndrome and pain: Protocol for a randomised controlled trial of exercise and corticosteroid injection (the SUPPORT trial)	no data; protocol
Roine, E. 2009	Cost-effectiveness of interventions based on physical exercise in the treatment of various diseases: A systematic literature review	not a relevant study or review
Romeo, A. A. 2004	Shoulder scoring scales for the evaluation of rotator cuff repair	not testing diagnostic modality
Ronquillo, J. 2013	Morphologic changes of synthetic (ePTFE) interpositional patch repair for massive irreparable rotator cuff tear: A short-term prospective clinical study	Case series
Rossi, F. 1998	Shoulder impingement syndromes	Does not address diagnostic question of interest
Rothenberg, A. 2017	The Coracoacromial Ligament: Anatomy, Function, and Clinical Significance	unrelated systematic review
Rotini, R. 2005	Algorithm for the treatment of calcific tendinitis in the rotator cuff: indications for arthroscopy and results in our experience	Prospective case series
Rouhani, A. 2014	Effects of preoperative non-steroidal anti-inflammatory drugs on pain mitigation and patients' shoulder performance following rotator cuff repair	does not fit PICO 6; may fit PICO 12

Author	Article Title	Reason for Exclusion
Roukoz, S. 2016	DELTOID FLAP for MANAGEMENT of MASSIVE IRREPARABLE ROTATOR CUFF TEARS: Case Series	no comparison group
Rouleau, D. M. 2012	Incidence of associated injury in posterior shoulder dislocation: Systematic review of the literature	Systematic review
Roy, J. S. 2015	Diagnostic accuracy of ultrasonography, MRI and MR arthrography in the characterisation of rotator cuff disorders: a systematic review and meta-analysis	Systematic review
Roy, J. S. 2010	A systematic review of the psychometric properties of the Constant-Murley score	Systematic review
Royer, P. J. 2009	Fluoroscopic assessment of rotator cuff fatigue on glenohumeral arthrokinematics in shoulder impingement syndrome	No sensitivity/specificity, LR, or ROC curve values
Rubenis, I. 2015	Arthroscopic Rotator Cuff Repair Using the Undersurface Technique: A 2-Year Comparative Study in 257 Patients	same technique but applied from diff regions
Rubenis, I. 2015	Arthroscopic Rotator Cuff Repair Using the Undersurface Technique: A 2-Year Comparative Study in 257 Patients	same procedure performed on diff sites, not PICO 9 relevant
Ruckstuhl, H. 2008	Post-traumatic glenohumeral cartilage lesions: a systematic review	Systematic review
Russell, R. D. 2014	Structural integrity after rotator cuff repair does not correlate with patient function and pain: a meta-analysis	meta-analysis
Rutten, M. J. 2010	Detection of rotator cuff tears: the value of MRI following ultrasound	*Not best available (low quality)
Rutten, M. J. C. M. 2010	Ultrasound detection of rotator cuff tears: Observer agreement related to increasing experience	*Not best available (moderate quality)
Rutten, M. J. C. M. 2010	Detection of rotator cuff tears: The value of MRI following ultrasound	*Not best available (low quality)
Ryliskis, S. 2009	Shoulder activity level in the preoperative assessment of patients with rotator cuff tears	Does not address prognostic question of interest (non-post-operative analysis)
Ryosa, A. 2017	Surgery or conservative treatment for rotator cuff tear: a meta-analysis	Meta analysis
Ryu, Rkn 2017	Arthroscopic transosseous suture repair and single-row anchor fixation for rotator cuff lesions did not differ for pain, function, or rotator-cuff integrity at 15 months	Poster presentation
Sabzevari, S. 2017	One-stage surgical treatment for concomitant rotator cuff tears with shoulder stiffness has	Systematic review

Author	Article Title	Reason for Exclusion
	comparable results with isolated rotator cuff tears: a systematic review	
Sabzevari, S. 2017	One-stage surgical treatment for concomitant rotator cuff tears with shoulder stiffness has comparable results with isolated rotator cuff tears: a systematic review	Systematic review
Sacomanno, M. F. 2015	Magnetic resonance imaging criteria for the assessment of the rotator cuff after repair: a systematic review	systematic review
Sacomanno, M. F. 2016	Prognostic factors influencing the outcome of rotator cuff repair: a systematic review	Systematic review
Sachinis, N. P. 2016	Suprascapular neuropathy in the setting of rotator cuff tears: study protocol for a double-blinded randomized controlled trial	study protocol; no data;
Safran, O. 2011	Natural history of nonoperatively treated symptomatic rotator cuff tears in patients 60 years old or younger	Natural History
Saggini, R 2010	Treatment of lesions of the rotator cuff	Not best available evidence
Sahan-Akyar, G. 1998	Gradient-echo versus fat-suppressed fast spin-echo MR imaging of rotator cuff tears	*Not best available (moderate quality)
Sahni, V. 2016	Review article: Risk factors for poor outcome following surgical treatment for rotator cuff tear	Systematic review
Sahni, V. 2016	Review article: Risk factors for poor outcome following surgical treatment for rotator cuff tear	Systematic review
Saier, T. 2015	Early results after modular non-cemented reverse total shoulder arthroplasty: a prospective single-centre study of 38 consecutive cases	Case series
Saithna, A. 2009	Is extracorporeal shockwave therapy for calcifying tendinitis of the rotator cuff associated with a significant improvement in the constant-murley score? A systematic review	systematic review
Saito, T. 2017	Short-term clinical results of frozen shoulder treated with shoulder manipulation under ultrasound-guided cervical nerve root block at outpatient setting: A case series	excludes RC tear pts
Sakellariou, G. 2013	Ultrasound imaging for the rheumatologist XLVIII. Ultrasound of the shoulders of patients with rheumatoid arthritis	*Not best available (moderate quality)
Salaffi, F. 2010	Clinical value of single versus composite provocative clinical tests in the assessment of painful shoulder	*Not best available (moderate quality)

Author	Article Title	Reason for Exclusion
Saltychev, M. 2015	Conservative treatment or surgery for shoulder impingement: systematic review and meta-analysis	Systematic review
Saltzman, B. M. 2017	Arthroscopic Repair of Isolated Subscapularis Tears: A Systematic Review of Technique-Specific Outcomes	Systematic review
Saltzman, B. M. 2016	Does the Use of Platelet-Rich Plasma at the Time of Surgery Improve Clinical Outcomes in Arthroscopic Rotator Cuff Repair When Compared With Control Cohorts? A Systematic Review of Meta-analyses	Systematic review
Saltzman, B. M. 2016	Does the Use of Platelet-Rich Plasma at the Time of Surgery Improve Clinical Outcomes in Arthroscopic Rotator Cuff Repair When Compared With Control Cohorts? A Systematic Review of Meta-analyses	Systematic review
Saltzman, B. M. 2017	Does early motion lead to a higher failure rate or better outcomes after arthroscopic rotator cuff repair? A systematic review of overlapping meta-analyses	Systematic review
Salviz, E. A. 2013	Continuous interscalene block in patients having outpatient rotator cuff repair surgery: a prospective randomized trial	Duplicate study (same as AAOSID 12566)
Salviz, Ea 2013	Continuous interscalene block in patients having outpatient rotator cuff repair surgery: a prospective randomized trial	Not best available evidence
Samitier, G. 2015	Reverse shoulder arthroplasty. Part 1: Systematic review of clinical and functional outcomes	systematic review
San Juan, J. G. 2013	Humeral head translation after a suprascapular nerve block	not a relevant study or review
Sandow, M. J. 2000	Acromioclavicular and sternoclavicular joints	opinion piece
Sandow, M. J. 2013	Hemiarthroplasty vs total shoulder replacement for rotator cuff intact osteoarthritis: How do they fare after a decade?	Not clinically relevant-PEER unable to extract additional outcomes (Review Later)
Sangwan, S. 2015	Stabilizing characteristics of rotator cuff muscles: a systematic review	Systematic Review
Sansone, V. C. 2015	Are occupational repetitive movements of the upper arm associated with rotator cuff calcific tendinopathies?	not a relevant study or review
Santamato, A 2016	Is Extracorporeal Shockwave Therapy Combined With Isokinetic Exercise More Effective Than Extracorporeal Shockwave Therapy Alone for Subacromial Impingement Syndrome? A Randomized Clinical Trial	pts w/prior surgery excluded from study

Author	Article Title	Reason for Exclusion
Santiago-Torres, J. 2015	The effect of smoking on rotator cuff and glenoid labrum surgery: a systematic review	Systematic review
Saqib, R. 2017	Comparison of magnetic resonance arthrography with arthroscopy for imaging of shoulder injuries: retrospective study	*Not best available (low quality)
Saraya, S. 2016	Ultrasound: Can it replace MRI in the evaluation of the rotator cuff tears?	*Not best available (moderate quality)
Saridakis, P. 2010	Outcomes of single-row and double-row arthroscopic rotator cuff repair: a systematic review	systematic review
Sauerbrey, A. M. 2005	Arthroscopic versus mini-open rotator cuff repair: A comparison of clinical outcome	Not best available evidence
Sauerbrey, A. M. 2005	Arthroscopic versus mini-open rotator cuff repair: a comparison of clinical outcome	*not best available
Savoie 3rd, F. H. 2001	Anterior superior instability with rotator cuff tearing: SLAC lesion	Case series
Savoie, F. H., 3rd 2015	The subscapularis-sparing approach in humeral head replacement	no comparison group
Savoie, F. H., 3rd 2016	A comparison of functional outcomes in patients undergoing revision arthroscopic repair of massive rotator cuff tears with and without arthroscopic suprascapular nerve release	Not applicable to PICO 11; imperfect comparison
Say, F. 2016	Platelet-rich plasma versus steroid injection for subacromial impingement syndrome	Not best available evidence
Sayampanathan, A. A. 2017	Systematic review on risk factors of rotator cuff tears	Systematic review
Sayampanathan, A. A. 2017	Systematic review on risk factors of rotator cuff tears	Systematic review
Sayana, M. K. 2009	Medium term results of reverse total shoulder replacement in patients with rotator cuff arthropathy	Incorrect patient population (<10 patients/ total groups)
Saygi, B 2014	Comparison of analgesic methods by using ropivacaine after arthroscopic shoulder surgery	Duplicate study (same as AAOSID 7470)
Saygi, B. 2014	Comparison of analgesic methods by using ropivacaine after arthroscopic shoulder surgery	Not best available evidence
Scarpone, M. 2013	Effectiveness of platelet-rich plasma injection for rotator cuff tendinopathy: A prospective open-label study	no comparison group
Schaeffeler, C. 2011	Tears at the rotator cuff footprint: prevalence and imaging characteristics in 305 MR arthrograms of the shoulder	not a relevant study or review

Author	Article Title	Reason for Exclusion
Schaeffeler, C. 2012	Lesions of the biceps pulley: diagnostic accuracy of MR arthrography of the shoulder and evaluation of previously described and new diagnostic signs	Duplicate to AAOSID 8202
Schairer, W. W. 2018	Risk Factors for Short-term Complications After Rotator Cuff Repair in the United States	*followup is less than 1 year*
Schairer, W. W. 2015	National utilization of reverse total shoulder arthroplasty in the United States	Does not address prognostic question of interest
Scheibel, M. 2007	Structural integrity and clinical function of the subscapularis musculotendinous unit after arthroscopic and open shoulder stabilization	Very low quality
Scheibel, M. 2006	Postoperative subscapularis muscle insufficiency after primary and revision open shoulder stabilization	not relevant to PICO
Schick, C. W. 2014	Thromboembolism following shoulder arthroscopy: A retrospective review	study on thromboembolism following shoulder arthroscopy
Schiefer, M. 2012	Clinical Diagnosis of Subscapularis Tendon Tear Using the Bear Hug Semiological Maneuver	*Not best available (moderate quality)
Schiefer, M. 2015	Intraobserver and interobserver agreement of Goutallier classification applied to magnetic resonance images	No sensitivity/specificity, LR, or ROC curve values
Schneider, T. 1994	Shoulder joint stability after arthroscopic subacromial decompression	not a relevant study or review
Schneider, T. L. 2003	The significance of subacromial arthrography to verify partial bursal-side rotator cuff ruptures	*Not best available (moderate quality)
Schroder, J. 2001	Open versus arthroscopic treatment of chronic rotator cuff impingement	*not best available
Schulte-Altdorneburg, G. 2003	MR arthrography: Pharmacology, efficacy and safety in clinical trials	Meta-analysis
Schwartzberg, R. S. 2013	Efficacy of continuous subacromial bupivacaine infusion for pain control after arthroscopic rotator cuff repair	Duplicate study (same as AAOSID 12563)
Schweitzer, M. E. 1994	Acromioclavicular joint fluid: determination of clinical significance with MR imaging	not a relevant study or review
Schydrowsky, P. 1998	The value of ultrasonography in the diagnosis of labral lesions in patients with anterior shoulder dislocation	*Not best available (moderate quality)
Scibek, J. S. 2010	Impact of pain on shoulder elevation velocity in patients with rotator cuff tears	Incorrect patient population (<10 patients/comparative group)
Sconfienza, L. M. 2012	Ultrasound assessment of the rotator cuff cable: comparison between young and elderly	not a relevant study or review



Author	Article Title	Reason for Exclusion
	asymptomatic volunteers and interobserver reproducibility	
Scott, A. 2013	Sports and exercise-related tendinopathies: a review of selected topical issues by participants of the second International Scientific Tendinopathy Symposium (ISTS) Vancouver 2012.[Erratum appears in Br J Sports Med. 2013 Aug;47(12):774 Note: Murphy, Richard J [added]; Carr, Andrew J [added]]	narrative review
Sebro, R. 2014	MR arthrography of the shoulder: Technical update and clinical applications	Background article
Seida, J. C. 2010	Systematic review: nonoperative and operative treatments for rotator cuff tears	Systematic review
Seil, R. 2006	Arthroscopic treatment of chronically painful calcifying tendinitis of the supraspinatus tendon	Not relevant to PICO's;
Seitz, A. L. 2011	Ultrasonographic measures of subacromial space in patients with rotator cuff disease: A systematic review	systematic review
Sela, Y. 2015	Rotator cuff tears: correlation between geometric tear patterns on MRI and arthroscopy and pre- and postoperative clinical findings	*Not best available (moderate quality)
Senbursa, G. 2011	The effectiveness of manual therapy in Supraspinatus Tendinopathy	pts that underwent shoulder surgery excluded
Senbursa, G. 2011	The effectiveness of manual therapy in supraspinatus tendinopathy	non-surgical
Seo, J. B. 2015	Correlation of clinical symptoms and function with fatty degeneration of infraspinatus in rotator cuff tear	not a relevant study or review
Seo, J. B. 2014	The accuracy of sonoelastography in fatty degeneration of the supraspinatus: a comparison of magnetic resonance imaging and conventional ultrasonography	*Not best available (moderate quality)
Seo, J. B. 2015	Sonoelastography findings of supraspinatus tendon in rotator cuff tendinopathy without tear: comparison with magnetic resonance images and conventional ultrasonography	no tears diagnosed
Serafini, G. 2009	Rotator cuff calcific tendonitis: Short-term and 10-year outcomes after two-needle US-guided percutaneous treatment - Nonrandomized controlled trial <sup>1</sup>	Not best available evidence
Sershon, R. A. 2013	Low accuracy of interpretation of rotator cuff MRI in patients with osteoarthritis	positive reference standard is less than 10

Author	Article Title	Reason for Exclusion
Seven, M. M. 2017	Effectiveness of prolotherapy in the treatment of chronic rotator cuff lesions	Duplicate to AAOSID 5360
Severud, E. L. 2003	All-arthroscopic versus mini-open rotator cuff repair: A long-term retrospective outcome comparison	*not best available
Sevivas, N. 2017	Reverse shoulder arthroplasty for irreparable massive rotator cuff tears: a systematic review with meta-analysis and meta-regression	Systematic review
Seyahi, A. 2009	Arthroscopic removal of intraosseous and intratendinous deposits in calcifying tendinitis of the rotator cuff	not relevant to PICO; <10 patients in group B
Shahabpour, M. 2008	The effectiveness of diagnostic imaging methods for the assessment of soft tissue and articular disorders of the shoulder and elbow	Systematic Review
Shalaby, M. H. 2017	Conventional MR in rotator cuff pathology. Is it sufficient?	*Not best available (moderate quality)
Shams, A. 2016	Subacromial injection of autologous platelet-rich plasma versus corticosteroid for the treatment of symptomatic partial rotator cuff tears	Not best available evidence
Shan, L. 2014	All-arthroscopic versus mini-open repair of small to large sized rotator cuff tears: a meta-analysis of clinical outcomes	meta-analysis
Shang, X. 2017	A meta-analysis comparing tenotomy and tenodesis for treating rotator cuff tears combined with long head of the biceps tendon lesions	Systematic review
Sharma, G. 2017	MR imaging of rotator cuff tears: Correlation with arthroscopy	*Not best available (moderate quality)
Sheah, K. 2009	Transverse thickening along the articular surface of the rotator cuff consistent with the rotator cable: Identification with MR arthrography and relevance in rotator cuff evaluation	*Not best available (moderate quality)
Sheah, K. 2009	Transverse thickening along the articular surface of the rotator cuff consistent with the rotator cable: identification with MR arthrography and relevance in rotator cuff evaluation	*Not best available (moderate quality)
Sheibani-Rad, S. 2013	Arthroscopic single-row versus double-row rotator cuff repair: a meta-analysis of the randomized clinical trials	meta-analysis
Shellock, F. G. 2001	Evaluation of the rotator cuff and glenoid labrum using a 0.2-Tesla extremity magnetic resonance (MR) system: MR results compared to surgical findings	*Not best available (moderate quality)

Author	Article Title	Reason for Exclusion
Shen, C. 2014	Incidence of retear with double-row versus single-row rotator cuff repair	meta-analysis
Shen, C. 2014	Does immobilization after arthroscopic rotator cuff repair increase tendon healing? A systematic review and meta-analysis	systematic review/meta analysis
Sheps, D. M. 2015	Early mobilisation following mini-open rotator cuff repair: a randomised control trial	Not best available evidence
Sheth, U. 2012	Efficacy of autologous platelet-rich plasma use for orthopaedic indications: A meta-analysis	Meta-analysis
Shibata, Y. 2001	Clinical evaluation of sodium hyaluronate for the treatment of patients with rotator cuff tear	N/A
Shih, T. T. 1993	MR patterns of rotator cuff and labral lesions: comparison between low-field and high-field images	*Not best available (low quality)
Shimokobe, H. 2017	Risk factors for retear of large/massive rotator cuff tears after arthroscopic surgery: an analysis of tearing patterns	Not applicable to PICO 8; no relevant risk factors
Shin, H. J. 2011	Feasibility of ultrasound-guided posterior approach for interscalene catheter placement during arthroscopic shoulder surgery	no comparison group; same treatment for all patients
Shin, J. J. 2016	Pectoralis major transfer for treatment of irreparable subscapularis tear: a systematic review	systematic review
Shin, S. J. 2016	Efficacy of a Subacromial Corticosteroid Injection for Persistent Pain After Arthroscopic Rotator Cuff Repair	Not best available evidence
Shin, S. J. 2015	Clinical Outcomes of Modified Mason-Allen Single-Row Repair for Bursal-Sided Partial-Thickness Rotator Cuff Tears: Comparison With the Double-Row Suture-Bridge Technique	*not best available
Shin, S. J. 2012	The efficacy of acromioplasty in the arthroscopic repair of small- to medium-sized rotator cuff tears without acromial spur: prospective comparative study	same as A12748
Shin, S. W. 2014	Effective analgesia with ultrasound-guided interscalene brachial plexus block for postoperative pain control after arthroscopic rotator cuff repair	Not best available evidence
Shin, S. J. 2012	The efficacy of acromioplasty in the arthroscopic repair of small- to medium-sized rotator cuff tears without acromial spur: prospective comparative study	duplicate of A12748
Shin, Y. K. 2018	Predictive factors of retear in patients with repaired rotator cuff tear on shoulder MRI	Not best available evidence

Author	Article Title	Reason for Exclusion
Shishido, H. 2012	Postoperative outcomes of arthroscopic subacromial decompression for rotator cuff tear with shoulder stiffness	Incorrect patient population (Not exclusive to full-thickness tears for prognostic patients)
Shon, M. S. 2015	Arthroscopic Partial Repair of Irreparable Rotator Cuff Tears: Preoperative Factors Associated With Outcome Deterioration Over 2 Years	Retrospective case series
Silva, B. M. 2017	Surgical Treatment of Rotator Cuff Tears After 65 Years of Age: A Systematic Review	Systematic Review
Silva, B. M. 2017	Surgical Treatment of Rotator Cuff Tears After 65 Years of Age: A Systematic Review	Systematic review
Silva, L. 2008	Accuracy of physical examination in subacromial impingement syndrome	no tear assessment
Silver, A. E. 2006	Using support vector machines to optimally classify rotator cuff strength data and quantify post-operative strength in rotator cuff tear patients	*Not best available (low quality)
Silver, Ae 2006	Using support vector machines to optimally classify rotator cuff strength data and quantify post-operative strength in rotator cuff tear patients	less than 20 pts total
Silverstein, B. A. 2006	Natural course of nontraumatic rotator cuff tendinitis and shoulder symptoms in a working population	Natural history
Simank, H. G. 2006	Incidence of rotator cuff tears in shoulder dislocations and results of therapy in older patients	*not best available
Simovitch, R. W. 2017	Rate of Improvement in Clinical Outcomes with Anatomic and Reverse Total Shoulder Arthroplasty	Not applicable to PICO 10; imperfect comparison
Singh, A. 2010	Massive rotator cuff tears: arthroscopy to arthroplasty	Background article
Singh, H 2001	The efficacy of continuous cryotherapy on the postoperative shoulder: a prospective, randomized investigation	Not best available evidence
Singh, H. 2001	The efficacy of continuous cryotherapy on the postoperative shoulder: a prospective, randomized investigation	Duplicate study (same as AAOSID 12506)
Singh, H. 2010	Evaluation of ultrasound as a tool for etiological diagnosis of painful arc syndrome	Incorrect patient population
Singh, J. A. 2012	Periprosthetic infections after shoulder hemiarthroplasty	Wrong article
Singiseti, K. 2011	Shoulder ultrasonography versus arthroscopy for the detection of rotator cuff tears: analysis of errors	*Not best available (low quality)

Author	Article Title	Reason for Exclusion
Singson, R. D. 1996	MR evaluation of rotator cuff pathology using T2-weighted fast spin-echo technique with and without fat suppression	SAME AS AAOS ID 12493
Singson, Rd 1996	MR evaluation of rotator cuff pathology using T2-weighted fast spin-echo technique with and without fat suppression	*Not best available (moderate quality)
Sipola, P. 2010	Detection and quantification of rotator cuff tears with ultrasonography and magnetic resonance imaging - A prospective study in 77 consecutive patients with a surgical reference	*Not best available (moderate quality)
Sipola, P. 2010	Detection and quantification of rotator cuff tears with ultrasonography and magnetic resonance imaging - a prospective study in 77 consecutive patients with a surgical reference	*Not best available (moderate quality)
Skedros, J. G. 2017	Frequency of Shoulder Corticosteroid Injections for Pain and Stiffness After Shoulder Surgery and Their Potential to Enhance Outcomes with Physiotherapy: A Retrospective Study	does not fit PICO 6; may fit PICO 12; participants underwent surgery with post-op injections
Skoff, H. D. 1995	Conservative open acromioplasty	Not best available evidence
Slabaugh, M. A. 2010	Does the literature confirm superior clinical results in radiographically healed rotator cuffs after rotator cuff repair?	Systematic review
Smith, C. D. 2012	Indications for reverse shoulder replacement: a systematic review	Systematic Review
Smith, C. D. 2012	Indications for reverse shoulder replacement	Background article
Smith, K. L. 2000	A prospective, multipractice study of shoulder function and health status in patients with documented rotator cuff tears	same risks factors assessed in a high quality study
Smith, T. O. 2011	Diagnostic accuracy of ultrasound for rotator cuff tears in adults: a systematic review and meta-analysis	Meta-analysis
Smith, T. O. 2012	The diagnostic accuracy of MRI for the detection of partial- and full-thickness rotator cuff tears in adults	Systematic review
Smucny, M. 2016	Poor Agreement on Classification and Treatment of Subscapularis Tendon Tears	No sensitivity/specificity, LR, or ROC curve values
Snyder, S. J. 1991	Partial thickness rotator cuff tears: results of arthroscopic treatment	Not best available evidence
Sobhy, M. H. 2018	Do functional outcomes and cuff integrity correlate after single- versus double-row rotator cuff repair? A systematic review and meta-analysis study	Systematic review

Author	Article Title	Reason for Exclusion
Soini, I. 2004	Magnetic resonance imaging of the rotator cuff in destroyed rheumatoid shoulder: comparison with findings during shoulder replacement	*Not best available (moderate quality)
Soini, I. 2004	Magnetic resonance imaging of the rotator cuff in destroyed rheumatoid shoulder: comparison with findings during shoulder replacement	*Not best available (low quality)
Somerville, L. 2013	Protocol for determining the diagnostic validity of physical examination maneuvers for shoulder pathology	not a study; no diagnostic comparison; protocol
Somerville, L. E. 2014	Clinical Assessment of Physical Examination Maneuvers for Rotator Cuff Lesions	*Not best available (low quality)
Song, L. 2016	Does concomitant acromioplasty facilitate arthroscopic repair of full-thickness rotator cuff tears? A meta-analysis with trial sequential analysis of randomized controlled trials	Meta-Analysis
Sonin, A. H. 1996	MR imaging of the rotator cuff mechanism: comparison of spin-echo and turbo spin-echo sequences	<10 tears
Sonnabend, D. H. 1997	The clinical role of shoulder ultrasound	*Not best available (moderate quality)
Sonnery-Cottet, B. 2002	Rotator cuff tears in middle-aged tennis players: results of surgical treatment	no comparison to conservative/non-surgical group
SooHoo, N. F. 1996	Diagnosis and treatment of rotator cuff tears in the emergency department	Background article
Soudy, K. 2017	Results and limitations of humeral head resurfacing: 105 cases at a mean follow-up of 5 years	no comparison treatment group
Southerst, D. 2015	The effectiveness of manual therapy for the management of musculoskeletal disorders of the upper and lower extremities: A systematic review by the Ontario Protocol for Traffic Injury Management (OPTIMA) Collaboration	Systematic review
Sowa, B. 2017	Functional results of hemi- and total shoulder arthroplasty according to diagnosis and patient age at surgery	not a diagnostic study
Spall, P. 2016	Electromyographic Activity of Shoulder Girdle Muscles in Patients With Symptomatic and Asymptomatic Rotator Cuff Tears: A Systematic Review and Meta-Analysis	Systematic Review
Spanghel, M. J. 2002	Arthroscopic versus open acromioplasty: a prospective, randomized, blinded study	pts w/known or suspected FTRCTs excluded

Author	Article Title	Reason for Exclusion
Spangehl, Mj 2002	Arthroscopic versus open acromioplasty: a prospective, randomized, blinded study	pts w/SIS not FTRCT
Speed, Ca 2002	Extracorporeal shock-wave therapy for tendonitis of the rotator cuff. A double-blind, randomised, controlled trial	no tear, no full-thickness for pts
Speer, K. P. 1994	An evaluation of the shoulder relocation test	*Not best available (moderate quality)
Speer, K. P. 1996	The efficacy of cryotherapy in the postoperative shoulder	Incorrect patient population (included patients <18 years)
Speer, Kp 1996	The efficacy of cryotherapy in the postoperative shoulder	Duplicate study (same as AAOSID 4919)
Spencer, B. A. 2013	Glenohumeral articular cartilage lesions: Prospective comparison of non-contrast magnetic resonance imaging and findings at arthroscopy	*Not best available (moderate quality)
Spennacchio, P. 2015	Long-term outcome after arthroscopic rotator cuff treatment	systematic review
Sperling, J. W. 2002	Magnetic resonance imaging of painful shoulder arthroplasty	*Not best available (low quality)
Spiegl, U. J. 2016	Summary of Meta-Analyses Dealing with Single-Row versus Double-Row Repair Techniques for Rotator Cuff Tears	Meta-analysis
Sproul, R. C. 2011	A systematic review of locking plate fixation of proximal humerus fractures	systematic review
Sridharan, R. 2017	Focal uptake at the rotator interval or inferior capsule of shoulder on 18F-FDG PET/CT is associated with adhesive capsulitis	positive reference standard is less than 10
Srikumaran, U. 2014	Scapular Winging: A great masquerader of shoulder disorders: AAOS exhibit selection	Not relevant to PICO's;
Stallenberg, B. 2001	Radiographic diagnosis of rotator cuff tear based on the supraspinatus muscle radiodensity	not a relevant study or review
Steinhaus, M. E. 2016	Outcomes After Patch Use in Rotator Cuff Repair	Systematic review
Steinhaus, M. E. 2016	Outcomes After Patch Use in Rotator Cuff Repair	Systematic review
Stetson, W. B. 2002	The crank test, the O'Brien test, and routine magnetic resonance imaging scans in the diagnosis of labral tears	*Not best available (moderate quality)
Stieler, M. A. 2002	Use of logistic regression analysis in the diagnosis of shoulder impingement syndrome	Not best available evidence (low quality)
Stiglitz, Y. 2011	Pain after shoulder arthroscopy: A prospective study on 231 cases	Not applicable to PICO 8; only univariate analysis

Author	Article Title	Reason for Exclusion
Stoppino, L. P. 2013	Lesions of the rotator cuff footprint: diagnostic performance of MR arthrography compared with arthroscopy	Not best available evidence
Storey, T. F. 2014	Postprocedural pain in shoulder arthrography: differences between using preservative-free normal saline and normal saline with benzyl alcohol as an intraarticular contrast diluent	not relevant to PICO 6; reducing pain for MR arthrography procedure, not RC pathology
St-Pierre, C. 2016	Psychometric properties of self-reported questionnaires for the evaluation of symptoms and functional limitations in individuals with rotator cuff disorders: a systematic review	systematic review
Strauss, E. J. 2011	The arthroscopic management of partial-thickness rotator cuff tears: A systematic review of the literature	Systematic review
Strauss, E. J. 2011	Multimedia article. The arthroscopic management of partial-thickness rotator cuff tears: a systematic review of the literature	Systematic Review
Strickland, J. P. 2010	Early Results of Concurrent Arthroscopic Repair of Rotator Cuff and Type II Superior Labral Anterior Posterior Tears	7 pts w/full thickness tears
Strobel, K. 2005	Fatty atrophy of supraspinatus and infraspinatus muscles: Accuracy of US	*Not best available (moderate quality)
Strobel, K. 2004	Suspected rotator cuff lesions: tissue harmonic imaging versus conventional US of the shoulder	*Not best available (moderate quality)
Struyf, F. 2014	Scapulothoracic muscle activity and recruitment timing in patients with shoulder impingement symptoms and glenohumeral instability	Systematic review
SubaÅ±, V. 2016	Comparison of efficacy of kinesiological taping and subacromial injection therapy in subacromial impingement syndrome	Not best available evidence
Subhas, N. 2017	Comparison of a fast 5-minute shoulder MRI protocol with a standard shoulder MRI protocol: A multiinstitutional multireader study	*Not best available (moderate quality)
Suder, P. A. 1995	Magnetic resonance imaging evaluation of capsulolabral tears after traumatic primary anterior shoulder dislocation. A prospective comparison with arthroscopy of 25 cases	*Not best available (moderate quality)
Sugaya, H. 2007	Repair integrity and functional outcome after arthroscopic double-row rotator cuff repair. A prospective outcome study	no comparison group



Author	Article Title	Reason for Exclusion
Sugaya, H. 2005	Functional and structural outcome after arthroscopic full-thickness rotator cuff repair: single-row versus dual-row fixation	Very low quality
Sun, C. 2017	Clinical efficacy comparison of arthroscopic subacromial smooth polishing and acromioplasty in treating of rotator cuff tears	both groups received concomitant treatment
Sun, L. 2015	Which is the best repair of articular-sided rotator cuff tears: a meta-analysis	Meta-analysis
Sunil, L. K. 2017	Does hypercholesterolemia predispose to rotator cuff pathologies?	Not relevant to PICOs; non-surgical; not a diagnostic study
Svendsen, S. W. 2014	Shoulder function and work disability after decompression surgery for subacromial impingement syndrome: A randomised controlled trial of physiotherapy exercises and occupational medical assistance	Protocol
Swen, W. A. 1999	Sonography and magnetic resonance imaging equivalent for the assessment of full-thickness rotator cuff tears	Less than 10 patients in negative reference standard group
Swen, W. A. 1998	Is sonography performed by the rheumatologist as useful as arthrography executed by the radiologist for the assessment of full thickness rotator cuff tears?	*Not best available (moderate quality)
Swen, W. A. A. 1999	Sonography and magnetic resonance imaging equivalent for the assessment of full-thickness rotator cuff tears	13 FTT, but only 8 intact shoulders
Swen, W. A. A. 1998	Is sonography performed by the rheumatologist as useful as arthrography executed by the radiologist for the assessment of full thickness rotator cuff tears?	*Not best available (moderate quality)
Szabo, I. 2008	The proximal biceps as a pain generator and results of tenotomy	Background article
Szczurko, O. 2009	Naturopathic treatment of rotator cuff tendinitis among Canadian postal workers: a randomized controlled trial	Not relevant to PICOs 5;
Szymanski, C. 2013	Reproducibility and reliability of subscapularis tendon assessment using CT-arthrography	*Not best available (moderate quality)
Tadgerbashi, K. 2014	Intervention randomized controlled trials involving wrist and shoulder arthroscopy: a systematic review	Systematic Review
Tahal, D. S. 2017	Subpectoral Biceps Tenodesis for Tenosynovitis of the Long Head of the Biceps in Active Patients Younger Than 45 Years Old	pts did not have RCTs

Author	Article Title	Reason for Exclusion
Taheri, P. 2017	Comparison of subacromial ketorolac injection versus corticosteroid injection in the treatment of shoulder impingement syndrome	Not best available evidence
Tajana, M. S. 2009	Correlations between biochemical markers in the synovial fluid and severity of rotator cuff disease	Natural history
Takagishi, K. 1996	Ultrasonography for diagnosis of rotator cuff tear	*Not best available (moderate quality)
Takeda, Y. 2016	Diagnostic Value of the Supine Napoleon Test for Subscapularis Tendon Lesions	*Not best available (moderate quality)
Takeda, Y. 2016	Diagnostic Value of the Supine Napoleon Test for Subscapularis Tendon Lesions	Not best available evidence
Tallroth, K. 1996	Shoulder imaging. A review	Background article
Tamai, K. 1999	Calcific tendinitis of the shoulder: Factors influencing the clinical outcome following corticosteroid injection into the subacromial bursa	Retrospective case series
Tan, V. 2002	Magnetic resonance imaging analysis of coracoid morphology and its relation to rotator cuff tears	Does not address diagnostic question of interest
Tandon, A. 2017	Sonography in diagnosis of adhesive capsulitis of the shoulder: a case-control study	Not best available evidence
Tang, X. 2015	Synthetic Mesh Improves Shoulder Function After Intraarticular Resection and Prosthetic Replacement of Proximal Humerus	Poster presentation
Tashjian, R. Z. 2016	The Natural History of Rotator Cuff Disease: Evidence in 2016	Natural History
Tashjian, R. Z. 2013	Is there Evidence in favor of surgical interventions for the subacromial impingement syndrome?	Systematic review
Tashjian, R. Z. 2012	Epidemiology, Natural History, and Indications for Treatment of Rotator Cuff Tears	Natural History
Tashjian, R. Z. 2016	Genome-wide association study for rotator cuff tears identifies two significant single-nucleotide polymorphisms	Not relevant to PICO's;
Tashjian, R. Z. 2010	Factors affecting healing rates after arthroscopic double-row rotator cuff repair	no comparison group
Tashjian, R. Z. 2014	Incidence of familial tendon dysfunction in patients with full-thickness rotator cuff tears	Not relevant to PICO's; non-surgical
Taverna, E. 2007	Radiofrequency-based plasma microtenotomy compared with arthroscopic subacromial decompression yields equivalent outcomes for rotator cuff tendinosis	not a relevant study or review

Author	Article Title	Reason for Exclusion
Taylor, D. W. 2011	A systematic review of the use of platelet-rich plasma in sports medicine as a new treatment for tendon and ligament injuries	Systematic Review
Taylor, S. A. 2017	Risk Factors for Revision Surgery After Superior Labral Anterior-Posterior Repair: A National Perspective	Not applicable to PICO 8
Taylor, S. A. 2017	Risk Factors for Revision Surgery After Superior Labral Anterior-Posterior Repair: A National Perspective	Duplicate article; same as 157
Teefey, S. A. 2000	Ultrasonography of the rotator cuff. A comparison of ultrasonographic and arthroscopic findings in one hundred consecutive cases	*Not best available (moderate quality)
Teefey, S. A. 2005	Detection and measurement of rotator cuff tears with sonography: analysis of diagnostic errors	*Not best available (moderate quality)
Teefey, S. A. 2004	Detection and quantification of rotator cuff tears. Comparison of ultrasonographic, magnetic resonance imaging, and arthroscopic findings in seventy-one consecutive cases	*Not best available (moderate quality)
Teerlink, C. C. 2015	Significant association of full-thickness rotator cuff tears and estrogen-related receptor-beta (ESRRB).[Erratum appears in J Shoulder Elbow Surg. 2016 May;25(5):864; PMID: 27085298]	Not relevant to PICOs; gene expression
Teichtahl, A. J. 2016	Statins and tendinopathy: A systematic review	Systematic Review
Temes, W. C. 2014	Reliability and validity of thickness measurements of the supraspinatus muscle of the shoulder: an ultrasonography study	all asymptomatic pts
Tempelaere, C 2016	Dynamic three-dimensional shoulder Mri during active motion for investigation of rotator cuff diseases	comparison group is 4 pts
Tempelaere, C. 2017	Surgical repair of massive rotator cuff tendon tears: Autologous quadriceps tendon graft versus arthroscopic repair	Very low quality
Tempelaere, C. 2017	Surgical repair of massive rotator cuff tendon tears: Autologous quadriceps tendon graft versus arthroscopic repair	Not best available evidence
Tempelaere, C. 2016	Dynamic three-dimensional shoulder Mri during active motion for investigation of rotator cuff diseases	Incorrect patient population (<10 patients/group)
Tempelaere, C. 2016	Dynamic Three-Dimensional Shoulder Mri during Active Motion for Investigation of Rotator Cuff Diseases	less than 20 pts total

Author	Article Title	Reason for Exclusion
Tetzlaff, J. E. 2000	Intraarticular morphine and bupivacaine reduces postoperative pain after rotator cuff repair	Not best available evidence
Tetzlaff, Je 2000	Intraarticular morphine and bupivacaine reduces postoperative pain after rotator cuff repair	Duplicate article (same as AAOSID 4537)
Teunis, T. 2014	A systematic review and pooled analysis of the prevalence of rotator cuff disease with increasing age	Systematic review
Thangarajah, T. 2015	Augmentation of Rotator Cuff Repair With Soft Tissue Scaffolds	Systematic Review
Theodoropoulos, J. S. 2010	Magnetic resonance imaging and magnetic resonance arthrography of the shoulder: Dependence on the level of training of the performing radiologist for diagnostic accuracy	*Not best available (low quality)
Thompson, S. M. 2012	A comparison of the degree of retraction of full-thickness supraspinatus tears with the Goutallier grading system	Not relevant to PICOs;
Thomson, S. 2016	Rehabilitation following surgical repair of the rotator cuff: a systematic review	systematic review
Tirman, P. F. 1994	Posterosuperior glenoid impingement of the shoulder: findings at MR imaging and MR arthrography with arthroscopic correlation	Incorrect patient population
Tirman, P. F. 1993	Saline magnetic resonance arthrography in the evaluation of glenohumeral instability	*Not best available (moderate quality)
Tirman, P. F. 1996	Humeral avulsion of the anterior shoulder stabilizing structures after anterior shoulder dislocation: demonstration by MRI and MR arthrography	only 6 pts w/RC tendon tears
Tirman, P. F. J. 1994	Posterosuperior glenoid impingement of the shoulder: Findings at MR imaging and MR arthrography with arthroscopic correlation	less than 10 pts
Titchener, A. G. 2014	Comorbidities in rotator cuff disease: A case-control study	Does not address prognostic question of interest
T'Jonck, L. 1997	Open versus arthroscopic subacromial decompression: analysis of one-year results	*not best available
Tokish, J. M. 2014	The Mature Athlete's Shoulder	Systematic Review
Tokish, J. M. 2017	Pseudoparalysis: a systematic review of term definitions, treatment approaches, and outcomes of management techniques	Systematic review
Toliopoulos, P. 2014	Efficacy of surgery for rotator cuff tendinopathy: a systematic review	Systematic Review
Toliopoulos, P. 2014	Efficacy of surgery for rotator cuff tendinopathy: a systematic review	systematic review

Author	Article Title	Reason for Exclusion
Toprak, U. 2013	Palpation tests versus impingement tests in Neer stage I and II subacromial impingement syndrome	*Not best available (moderate quality)
Torrens, C. 2007	The influence of the acromial coverage index in rotator cuff tears	Imperfect comparator
Torrens, C. 2003	Open anterior acromioplasty with preservation of the coracoacromial ligament: A modified surgical technique	Not best available evidence
Torstensen, E. T. 1999	Comparison of magnetic resonance imaging and arthroscopy in the evaluation of shoulder pathology	*Not best available (moderate quality)
Toussaint, B. 2012	Arthroscopic repair of subscapularis tears: Preliminary data from a prospective multicentre study	same procedure on different components
Toussaint, B. 2011	Early structural and functional outcomes for arthroscopic double-row transosseous-equivalent rotator cuff repair	no comparison group
Toyoda, H. 2005	Evaluation of rotator cuff tears with magnetic resonance arthrography	*Not best available (low quality)
Trappey 4th, G. J. 2011	A systematic review of the clinical outcomes of single row versus double row rotator cuff repairs	Systematic Review
Trappey, G. J. th 2011	A systematic review of the clinical outcomes of single row versus double row rotator cuff repairs	Systematic review
Traugher, P. D. 1992	Shoulder MRI: arthroscopic correlation with emphasis on partial tears	*Not best available (low quality)
Trenerry, K. 2005	Prevention of shoulder stiffness after rotator cuff repair	Incorrect patient population (Not exclusive to full-thickness tears for prognostic patients)
Tse, A. K. 2016	Ultrasound determination of rotator cuff tear repairability	excluded any patients without full thickness RC tears
Tsikopoulos, K. 2016	The clinical impact of platelet-rich plasma on tendinopathy compared to placebo or dry needling injections: A meta-analysis	Meta-analysis
Tudisco, C. 2013	Single-row vs. double-row arthroscopic rotator cuff repair: clinical and 3 Tesla MR arthrography results	Very low quality
Tudisco, C. 2015	Tendon quality in small unilateral supraspinatus tendon tears. Real-time sonoelastography correlates with clinical findings	*Not best available (moderate quality)
Tuite, M. J. 2012	Magnetic resonance imaging of rotator cuff disease and external impingement	Background article
Tuite, M. J. 2001	Angled oblique sagittal MR imaging of rotator cuff tears: comparison with standard oblique sagittal images	*Not best available evidence

Author	Article Title	Reason for Exclusion
Tuite, M. J. 1995	Effect of field of view on MR diagnosis of rotator cuff tears	*Not best available (low quality)
Tung, G. A. 2000	High-field and low-field MR imaging of superior glenoid labral tears and associated tendon injuries	all patients had SLAP tears; no negative ref std
Turk, A. C. 2017	Painful and painless shoulder Magnetic Resonance Imaging comparisons in hemodialysis patients and correlation with clinical findings	*Not best available (low quality)
Ulasli, A. 2013	The effect of acromioclavicular joint degeneration on orthopedic shoulder tests	no comparison/control group
Umans, H. R. 2001	Correlation of radiographic and arthroscopic findings with rotator cuff tears and degenerative joint disease	*Not best available (low quality)
Updegrave, G. F. 2015	Posterior Displacement of Supraspinatus Central Tendon Observed on Magnetic Resonance Imaging: A Useful Preoperative Indicator of Rotator Cuff Tear Characteristics	no diagnostic value tested
Urita, A 2017	Difference in vascular patterns between transosseous-equivalent and transosseous rotator cuff repair	Not best available evidence
Urita, A. 2017	Difference in vascular patterns between transosseous-equivalent and transosseous rotator cuff repair	*not best available
Vad, V. B. 2002	Negative prognostic factors in managing massive rotator cuff tears	Not Applicable to PICO 10; statistical analysis encompasses 3 study groups in which only 2 groups are applicable
Valenti, P. 2010	Results of latissimus dorsi tendon transfer in primary or salvage reconstruction of irreparable rotator cuff tears	Not relevant to PICOs; no comparison
van den Broek, C. M. 2007	Displaced proximal humeral fractures: Intramedullary nailing versus conservative treatment	Very low quality
van der Meijden, O. A. 2012	Rehabilitation after arthroscopic rotator cuff repair: current concepts review and evidence-based guidelines	Systematic review
Van Der Molen, H. F. 2017	Work-related risk factors for specific shoulder disorders: A systematic review and meta-analysis	Systematic review
Van Der Sande, R. 2013	Subacromial impingement syndrome: Effectiveness of pharmaceutical interventions-nonsteroidal anti-inflammatory drugs, corticosteroid, or other injections: A systematic review	Systematic review

Author	Article Title	Reason for Exclusion
Van Der Veen, H. C. 2012	Value of magnetic resonance arthrography in post-traumatic anterior shoulder instability prior to arthroscopy: A prospective evaluation of MRA versus arthroscopy	only 18 pts total
van der Veen, H. C. 2012	Value of magnetic resonance arthrography in post-traumatic anterior shoulder instability prior to arthroscopy: a prospective evaluation of MRA versus arthroscopy	only 18 pts
Van Der Zwaal, P. 2014	The natural history of the rheumatoid shoulder: A prospective long-term follow-up study	Duplicate to AAOS ID 1509 (Natural History)
van der Zwaal, P. 2014	The natural history of the rheumatoid shoulder: a prospective long-term follow-up study	Natural History
Van Der Zwaal, P. 2013	Clinical outcome in all-arthroscopic versus mini-open rotator cuff repair in small to medium-sized tears: A randomized controlled trial in 100 patients with 1-year follow-up	same as A12619
van der Zwaal, P. 2013	Clinical outcome in all-arthroscopic versus mini-open rotator cuff repair in small to medium-sized tears: a randomized controlled trial in 100 patients with 1-year follow-up	same as A12619
van der Zwaal, P. 2012	Preoperative agreement on the geometric classification and 2-dimensional measurement of rotator cuff tears based on magnetic resonance arthrography	no diagnostic imaging method measured
van Deurzen, D. F. 2016	Long head Biceps TENodesis or tenotomy in arthroscopic rotator cuff repair: BITE study protocol	no outcomes reported
Van Deurzen, D. F. P. 2016	Long head Biceps TENodesis or tenotomy in arthroscopic rotator cuff repair: BITE study protocol	study protocol, no results
Van Dyck, P. 2009	Tears of the supraspinatus tendon: assessment with indirect magnetic resonance arthrography in 67 patients with arthroscopic correlation	*Not best available (moderate quality)
van Grinsven, S. 2007	MR arthrography of traumatic anterior shoulder lesions showed modest reproducibility and accuracy when evaluated under clinical circumstances	*Not best available (moderate quality)
van Holsbeeck, M. T. 1995	US depiction of partial-thickness tear of the rotator cuff	*Not best available (moderate quality)
van Kampen, D. A. 2014	The diagnostic value of the combination of patient characteristics, history, and clinical shoulder tests for the diagnosis of rotator cuff tear	*Not best available evidence
van Moppes, F. I. 1995	Role of shoulder ultrasonography in the evaluation of the painful shoulder	*Not best available (moderate quality)

Author	Article Title	Reason for Exclusion
van Rijn, R. M. 2010	Associations between work-related factors and specific disorders of the shoulder--a systematic review of the literature	Systematic review
Vanden Bossche, L. 2015	A multi-center, double-blind, randomized, placebo-controlled trial protocol to assess Traumeel injection vs dexamethasone injection in rotator cuff syndrome: the TRAumeel in ROTator cuff syndrome (TRARO) study protocol	study protocol; no results
Vanden Bossche, L. 2015	A multi-center, double-blind, randomized, placebocontrolled trial protocol to assess Traumeel injection vs dexamethasone injection in rotator cuff syndrome: The TRAumeel in ROTator cuff syndrome (TRARO) study protocol	repeat (AAOS ID 1327)
Vandevenne, J. E. 2009	Fast MR arthrography using VIBE sequences to evaluate the rotator cuff	*Not best available (moderate quality)
Vas, J. 2008	Single-point acupuncture and physiotherapy for the treatment of painful shoulder: A multicentre randomized controlled trial	pts did not undergo surgery (underwent physiotherapy)
Vastamaki, H. 2012	The natural history of idiopathic frozen shoulder: a 2- to 27-year followup study	Natural History
Vastamaki, M. 2013	Rotator cuff integrity correlates with clinical and functional results at a minimum 16 years after open repair	not a relevant study or review
Vavken, P. 2015	Platelet-Rich Plasma Reduces Retear Rates After Arthroscopic Repair of Small- and Medium-Sized Rotator Cuff Tears but Is Not Cost-Effective	Meta-analysis
Veado, M. A. 2010	Functional Evaluation of Patients Who Have Undergone Arthroscopic Debridement to Treat Massive and Irreparable Tears of the Rotator Cuff	no comparison group
Vecchio, P. C. 1993	A double-blind trial comparing subacromial methylprednisolone and lignocaine in acute rotator cuff tendinitis	Not best available evidence
Venu, K. M. 2002	Evaluation of the symptomatic supraspinatus tendon - A comparison of ultrasound and arthroscopy	Not best available evidence (moderate quality)
Verhaegen, F. 2016	Rotator cuff healing after needling of a calcific deposit using platelet-rich plasma augmentation: a randomized, prospective clinical trial	*not best available
Verma, N. N. 2006	All-arthroscopic versus mini-open rotator cuff repair: a retrospective review with minimum 2-year follow-up	*not best available



Author	Article Title	Reason for Exclusion
Vestermarck, G. L. 2018	The prevalence of rotator cuff pathology in the setting of acute proximal biceps tendon rupture	Natural history
Vick, C. W. 1990	Rotator cuff tears: diagnosis with sonography	*Not best available (moderate quality)
Vidt, Me 2016	Assessments of fatty infiltration and muscle atrophy from a single magnetic resonance image slice are not predictive of 3-dimensional measurements	no sensitivity, specificity, or accuracy measurements
Viehofer, A. 2016	A larger critical shoulder angle requires more rotator cuff activity to preserve joint stability	Not relevant to PICO; critical shoulder angle
Vignesh, K. N. 2015	Efficacy of ultrasound-guided percutaneous needle treatment of calcific tendinitis	Systematic review
Vincent, K. 2017	Are degenerative rotator cuff disorders a cause of shoulder pain? Comparison of prevalence of degenerative rotator cuff disease to prevalence of nontraumatic shoulder pain through three systematic and critical reviews	Systematic review
Vinson, E. N. 2012	MRI of selected abnormalities at the anterior superior aspect of the shoulder: potential pitfalls and subtle diagnoses	Background article
Virk, M. S. 2016	Irreparable Rotator Cuff Tears Without Arthritis Treated With Reverse Total Shoulder Arthroplasty	not a study
Viskontas, D. G. 2005	Reliability and comparison of acromion assessment techniques on X-ray and magnetic resonance imaging (reliability of acromion assessment techniques)	testing for morphology, not tears
Vitali, M. 2015	Employment of synthetic patch with augmentation of the long head of the biceps tendon in irreparable lesions of the rotator cuff: our technique applied to 60 patients	Imperfect comparator
Vlychou, M. 2009	Symptomatic partial rotator cuff tears: diagnostic performance of ultrasound and magnetic resonance imaging with surgical correlation	*Not best available (low quality)
Voigt, C. 2010	Arthroscopic supraspinatus tendon repair with suture-bridging technique: functional outcome and magnetic resonance imaging	no comparison group
Volpi, D. 2003	Capsulo-labro-ligamentous lesions of the shoulder: evaluation with MR arthrography	*Not best available (low quality)
Volpi, D. 2003	Capsulo-labro-ligamentous lesions of the shoulder: Evaluation with MR arthrography	*Not best available (moderate quality)
von Knoch, M. 2016	Duration of sick leave after shoulder arthroscopy in Germany: analysis of health care data	same risks factors assessed in a high quality study

Author	Article Title	Reason for Exclusion
von Wehren, L. 2016	The effect of subacromial injections of autologous conditioned plasma versus cortisone for the treatment of symptomatic partial rotator cuff tears	Not best available evidence
Voos, J. E. 2012	Arthroscopic rotator cuff repair: techniques in 2012	Narrative review
Vopat, B. G. 2016	Risk Factors for Infection After Rotator Cuff Repair	measuring infection, no RC full thickness tears
Vopat, B. G. 2014	The global percutaneous shuttling technique tip for arthroscopic rotator cuff repair	no comparison group
Wade, R 2017	Clinico-radiological evaluation of retear rate in arthroscopic double row versus single row repair technique in full thickness rotator cuff tear	Not best available evidence
Wade, R. 2017	Clinico-radiological evaluation of retear rate in arthroscopic double row versus single row repair technique in full thickness rotator cuff tear	*not best available
Wagner, S. C. 2002	Shoulder instability: accuracy of MR imaging performed after surgery in depicting recurrent injury--initial findings	*Not best available (moderate quality)
Walch, G. 1998	The 'dropping' and 'hornblower's' signs in evaluation of rotator-cuff tears	Not applicable to PICO 8; only univariate analysis
Walch, G. 1998	The 'dropping' and 'hornblower's' signs in evaluation of rotator-cuff tears	*Not best available (low quality)
Walch, G. 2009	Musculotendinous infraspinatus ruptures: an overview	No sensitivity, specificity, ROC curve
Waldt, S. 2006	Variants of the superior labrum and labro-bicipital complex: a comparative study of shoulder specimens using MR arthrography, multi-slice CT arthrography and anatomical dissection	Does not address diagnostic question of interest
Walker, M. 2011	How reverse shoulder arthroplasty works	Systematic review
Wall, L. B. 2009	Clinical outcomes of double-row versus single-row rotator cuff repairs	Systematic review
Wall, L. B. 2012	Diagnostic performance and reliability of ultrasonography for fatty degeneration of the rotator cuff muscles	*Not best available (moderate quality)
Wall, Lb 2012	Diagnostic performance and reliability of ultrasonography for fatty degeneration of the rotator cuff muscles	*Not best available (low quality)
Wallny, T. 1999	Evaluation of chronic tears of the rotator cuff by ultrasound. A new index	Incorrect patient population
Wallny, T. A. 2001	Three-dimensional ultrasonography in the diagnosis of rotator cuff lesions	*Not best available (moderate quality)

Author	Article Title	Reason for Exclusion
Wallny, T. A. 2001	Three-dimensional ultrasonography in the diagnosis of rotator cuff lesions	*Not best available (moderate quality)
Walmsley, R. P. 1992	Shoulder strength following surgical rotator cuff repair: A comparative analysis using isokinetic testing	Very low quality
Walsworth, M. K. 2008	Reliability and diagnostic accuracy of history and physical examination for diagnosing glenoid labral tears	<10 FTT and PTT
Walton, J. R. 2012	A two-year clinical outcomes study of 400 patients, comparing open surgery and arthroscopy for rotator cuff repair	*not best available
Wan, K. H. M. 2016	Magnetic Resonance Imaging of the Subcoracoid Region and Its Relationship with Subscapularis Lesions in the Chinese Population	Does not address diagnostic question of interest
Wang, C. H. 2012	Using a nurse invented T-Bar device in a rehabilitation program improved the range of motion for rotator cuff repair patients	Not best available evidence
Wang, E. 2015	Single-versus double-row arthroscopic rotator cuff repair in massive tears	results combined of partial, full, massive tears
Wang, E. Z. 2015	Single-versus double-row arthroscopic rotator cuff repair in massive tears	*not best available
Wang, J. C. 2000	Comparison of MRI and radiographs in the evaluation of acromial morphology	not a relevant study or review
Wang, T. L. 2014	Effect of isokinetic training on shoulder impingement	Systematic review
Wang, X. 2013	A meta-analysis of plate fixation versus intramedullary nailing for humeral shaft fractures	meta analysis
Wang, Y. C. 2009	Dynamic visualization of the coracoacromial ligament by ultrasound	all healthy pts
Wang, Y. M. 1994	Magnetic resonance imaging of rotator cuff lesions	*Not best available (low quality)
Ward, J. R. N. 2018	Diagnostic difficulties in the radiological assessment of subscapularis tears	Not best available evidence
Warrender, W. J. 2011	Outcomes of arthroscopic rotator cuff repairs in obese patients	Incorrect patient population (Not exclusive to full-thickness tears for prognostic patients)
Warth, R. J. 2015	Clinical and structural outcomes after arthroscopic repair of full-thickness rotator cuff tears with and without platelet-rich product supplementation: a meta-analysis and meta-regression	Meta-analysis
Watanabe, K. 2016	Particulate-steroid betamethasone added to ropivacaine in interscalene brachial plexus block for	Duplicate study (same as AAOSID 363)

Author	Article Title	Reason for Exclusion
	arthroscopic rotator cuff repair improves postoperative analgesia	
Waterman, B. R. 2015	SLAP Repairs With Combined Procedures Have Lower Failure Rate Than Isolated Repairs in a Military Population: Surgical Outcomes With Minimum 2-Year Follow-up	Not relevant to PICOs; no primary RC repair
Watson, J. 2008	Shoulder acute pain in primary healthcare: Is retraining effective for GP principals? SAPPHIRE - A randomized controlled trial	Not best available evidence
Watson, S. T. 2017	Comparison of Outcomes 1 Year After Rotator Cuff Repair With and Without Concomitant Biceps Surgery	Not best available evidence
Weber, S. C. 1999	Arthroscopic debridement and acromioplasty versus mini-open repair in the treatment of significant partial-thickness rotator cuff tears	Not best available evidence
Weber, S. C. 2007	Pain scores in the management of postoperative pain in shoulder surgery	Not best available evidence
Wei, Y. 2014	Effective background infusion rate of ropivacaine 0.2% for patient-controlled interscalene brachial plexus analgesia after rotator cuff repair surgery	Not best available evidence
Weinheimer, K. T. 2017	Patient Outcomes as a Function of Shoulder Surgeon Volume: A Systematic Review	Systematic review
Weishaupt, D. 1999	Lesions of the reflection pulley of the long biceps tendon. MR arthrographic findings	14 total pts
Wendelboe, A. M. 2004	Associations between Body-Mass Index and Surgery for Rotator Cuff Tendinitis	Not indicative of exclusivity to full-thickness tears for prognostic patients
Wendelboe, A. M. 2004	Associations between body-mass index and surgery for rotator cuff tendinitis	risk factor association for RC pathology; no post-op assessment
Werner, B. C. 2016	Causes of poor postoperative improvement after reverse total shoulder arthroplasty	Incorrect patient population (not exclusive to primary surgical repair)
Werner, B. C. 2016	Causes of poor postoperative improvement after reverse total shoulder arthroplasty	Same as AAOSID 6152
Werner, B. S. 2017	The influence of three-dimensional planning on decision-making in total shoulder arthroplasty	not a diagnostic study; no reference standard
Wesner, M. 2016	A pilot study evaluating the effectiveness of platelet-rich plasma therapy for treating degenerative tendinopathies: A randomized control trial with synchronous observational cohort	not relevant to PICO 6; RCT has populations <10 per group; observational study has no comparison group

Author	Article Title	Reason for Exclusion
White, A. 2006	A review of acupuncture clinical trials indexed during 2005	Systematic review
White, C. B. 2003	Ninety-day mortality after shoulder arthroplasty	Incorrect patient population amongst prognostic (arthropathy)
Wiater, J. M. 2014	Clinical and radiographic results of cementless reverse total shoulder arthroplasty: a comparative study with 2 to 5 years of follow-up	pts w/diagnosis of RC tear arthropathy
Wiener, S. N. 1993	Sonography of the shoulder in patients with tears of the rotator cuff: Accuracy and value for selecting surgical options	<10 non tears
Wiener, S. N. 1993	Sonography of the shoulder in patients with tears of the rotator cuff: accuracy and value for selecting surgical options	*Not best available (moderate quality)
Wild, J. R. 2011	Functional outcomes for surgically treated 3- and 4-part proximal humerus fractures	no inclusion for RC tears, only fractures
Williams Jr, G. 2014	No difference in postoperative pain after arthroscopic versus open rotator cuff repair	Duplicate study (same as AAOSID 1596)
Williams, G. R. 2000	Management of rotator cuff and impingement injuries in the athlete	Background article
Williams, G., Jr. 2014	No difference in postoperative pain after arthroscopic versus open rotator cuff repair	*not best available
Williams, M. 2006	Humeral head cysts and rotator cuff tears: An MR arthrographic study	not a relevant study or review
Wilson, F. 2002	Arthroscopic repair of full-thickness tears of the rotator cuff: 2- to 14-year follow-up	*not best available
Wiseman, S. P. 2017	Current trends in orthobiologics and shoulder surgery	Background article
Wittenberg, R. H. 2001	Surgical or conservative treatment for chronic rotator cuff calcifying tendinitis - A matched-pair analysis of 100 patients	Not applicable to PICO 8; includes partial tears
Wnorowski, D. C. 1997	Magnetic resonance imaging assessment of the rotator cuff: Is it really accurate?	*Not best available (low quality)
Wolf, E. M. 2001	Transdeltoid palpation (the rent test) in the diagnosis of rotator cuff tears	*Not best available (low quality)
Wong, A. K. 2016	Effect of Local Anesthetic Concentration (0.2% vs 0.1% Ropivacaine) on Pulmonary Function, and Analgesia After Ultrasound-Guided Interscalene Brachial Plexus Block: A Randomized Controlled Study	Not best available evidence
Worland, R. L. 1993	Treatment of rotator cuff impingement	no comparison group

Author	Article Title	Reason for Exclusion
Worland, R. L. 1997	Bipolar shoulder arthroplasty for rotator cuff arthropathy	no comparison group
Wright, A. A. 2016	Subacute effects of cervicothoracic spinal thrust/non-thrust in addition to shoulder manual therapy plus exercise intervention in individuals with subacromial impingement syndrome: a prospective, randomized controlled clinical trial pilot study	pts w/previous surgery excluded in study
Wright, A. A. 2013	Diagnostic accuracy of scapular physical examination tests for shoulder disorders: a systematic review	Systematic review
Wright, S. A. 1996	Management of partial-thickness rotator cuff tears	Not best available evidence
Wu, C. H. 2010	Evaluating Displacement of the Coracoacromial Ligament in Painful Shoulders of Overhead Athletes Through Dynamic Ultrasonographic Examination	not a relevant study or review
Wu, C. L. 2002	Comparison of postoperative pain in patients receiving interscalene block or general anesthesia for shoulder surgery	Not best available evidence
Wu, H. P. 2003	Association of shoulder sonographic findings with subsequent surgical treatment for rotator cuff injury	Not best available evidence
Wu, T. 2015	Effectiveness of Botulinum Toxin for Shoulder Pain Treatment: A Systematic Review and Meta-Analysis	Systematic review
Wu, T. 2015	Ultrasound-guided versus blind subacromial-subdeltoid bursa injection in adults with shoulder pain: A systematic review and meta-analysis	Systematic review
Wu, X. L. 2012	Intraoperative determinants of rotator cuff repair integrity: an analysis of 500 consecutive repairs	6 month follow up duration, not 12
Wylie, J. D. 2016	Mental Health Has a Stronger Association with Patient-Reported Shoulder Pain and Function Than Tear Size in Patients with Full-Thickness Rotator Cuff Tears	Incorrect patient population (no primary surgery)
Xiao, J. 2015	Clinical and structural results of arthroscopic repair of bursal-side partial-thickness rotator cuff tears	No sensitivity/specificity, LR, or ROC curve values
Xiao, J. 2010	Diagnosis of bursal-side partial-thickness rotator cuff tears	Not relevant outcomes; no likelihood ratio/sensitivity/specificity/ROC curve
Xiao, W. Y. 2016	Efficacy and clinical outcomes of platelet-rich plasma for arthroscopic repair rotator cuff tears: A meta-analysis	meta-analysis
Xu, C. 2014	Meta-analysis comparing single-row and double-row repair techniques in the arthroscopic treatment of rotator cuff tears	Meta-analysis

Author	Article Title	Reason for Exclusion
Xu, J. 2013	All arthroscopic release of the glenohumeral joint for severe frozen shoulder: Initial glenohumeral visualization through trans-cuff portal	Not applicable to PICO 8; no risk factors
YaÇŞci, B. 2001	Indirect MR arthrography of the shoulder in detection of rotator cuff ruptures	*Not best available (moderate quality)
Yadav, P. K. 2014	Biceps tendon sheath effusion as a diagnostic clue to rotator cuff pathology	not a relevant study or review
Yagci, B. 2001	Indirect MR arthrography of the shoulder in detection of rotator cuff ruptures	*Not best available (low quality)
Yamaguchi, K. 2001	Natural history of asymptomatic rotator cuff tears: a longitudinal analysis of asymptomatic tears detected sonographically	Natural History
Yamakawa, S. 2001	Comparative studies of MRI and operative findings in rotator cuff tear	*Not best available (moderate quality)
Yamamoto, N. 2017	Risk Factors for Tear Progression in Symptomatic Rotator Cuff Tears: A Prospective Study of 174 Shoulders	no treatment comparison group
Yang, J. 2016	Can patients get better clinical outcomes by using PRP in rotator cuff repair: a meta-analysis of randomized controlled trials	Meta-analysis
Yang, J., Jr. 2017	The Clinical Effect of a Rotator Cuff Retear: A Meta-analysis of Arthroscopic Single-Row and Double-Row Repairs	Meta-analysis
Yang, J., Jr. 2017	The Clinical Effect of a Rotator Cuff Retear: A Meta-analysis of Arthroscopic Single-Row and Double-Row Repairs	Systematic review
Yelnik, A. P. 2007	Treatment of shoulder pain in spastic hemiplegia by reducing spasticity of the subscapular muscle: A randomised, double blind, placebo controlled study of botulinum toxin A	Not best available evidence
Yen, C. H. 2004	Six surgery-correlated sonographic signs for rotator cuff tears: emphasis on partial-thickness tear	*Not best available (moderate quality)
Yeu, K. 1994	Correlation between MRI and operative findings of the rotator cuff tear	*Not best available (moderate quality)
Yi, A. 2015	A Comparison of Rehabilitation Methods After Arthroscopic Rotator Cuff Repair: A Systematic Review	Systematic Review
Ying, Z. 2014	Arthroscopic single-row versus double-row technique for repairing rotator cuff tears: a systematic review and meta-analysis	Systematic review

Author	Article Title	Reason for Exclusion
Ying, Z. M. 2014	Arthroscopic single-row versus double-row technique for repairing rotator cuff tears: a systematic review and meta-analysis	systematic review/meta analysis
Yoon, J. P. 2016	Outcomes of Combined Bone Marrow Stimulation and Patch Augmentation for Massive Rotator Cuff Tears	Incorrect patient population (massive tears for marrow stimulation w/ patch)
Yoon, J. P. 2013	Diagnostic value of four clinical tests for the evaluation of subscapularis integrity	*Not best available (low quality)
Yoon, J. P. 2017	Deltoid muscle volume affects clinical outcome of reverse total shoulder arthroplasty in patients with cuff tear arthropathy or irreparable cuff tears	Not relevant to PICO's; not a diagnostic study
Yoon, Y. C. 2017	Polydeoxyribonucleotide Injection in the Treatment of Chronic Supraspinatus Tendinopathy: A Case-Controlled, Retrospective, Comparative Study With 6-Month Follow-Up	Not best available evidence
Yoon, Y. C. 2017	Polydeoxyribonucleotide Injection in the Treatment of Chronic Supraspinatus Tendinopathy: A Case-Controlled, Retrospective, Comparative Study With 6-Month Follow-Up	Duplicate to AAOSID 5368
Yoshida, M. 2006	Calcitonin treatment for calcifying tendinitis of the shoulder	Imperfect comparison group
Young, S. W. 2009	The SMR reverse shoulder prosthesis in the treatment of cuff-deficient shoulder conditions	no comparison group
Youssef, M. A. 2013	Ultrasonographic and MR diagnosis of rotator cuff disorders & shoulder joint instability	*Not best available (low quality)
Yu, H. 2015	Effectiveness of passive physical modalities for shoulder pain: systematic review by the Ontario protocol for traffic injury management collaboration	Systematic review
Yuen, C. K. 2012	The validity of 9 physical tests for full-thickness rotator cuff tears after primary anterior shoulder dislocation in ED patients	*Not best available (low quality)
Yun, G. 2017	Posterior decentering of the humeral head on Shoulder MR arthrography: Significant association with posterior synovial proliferation	Does not address diagnostic question of interest
Yun, Mj 2012	Subacromial patient-controlled analgesia with ropivacaine provides effective pain control after arthroscopic rotator cuff repair	Duplicate study (same as AAOSID 2455)
Zaiton, F. 2011	Painful poststroke shoulder: Comparison of magnetic resonance imaging and high frequency ultrasonography	*Not best available (moderate quality)



Author	Article Title	Reason for Exclusion
Zaslav, K. R. 2001	Internal rotation resistance strength test: a new diagnostic test to differentiate intra-articular pathology from outlet (Neer) impingement syndrome in the shoulder	*Not best available (moderate quality)
Zehetgruber, H. 2002	Distinction between supraspinatus, infraspinatus and subscapularis tendon tears with ultrasound in 332 surgically confirmed cases	*Not best available (moderate quality)
Zhang, J. L. 2017	Early motion versus immobilization for arthroscopic repair in the treatment of large size rotator cuff tears	Not best available evidence
Zhang, Q. 2013	Are platelet-rich products necessary during the arthroscopic repair of full-thickness rotator cuff tears: a meta-analysis	meta-analysis
Zhang, Q. 2013	Single-row or double-row fixation technique for full-thickness rotator cuff tears: a meta-analysis	Meta-analysis
Zhang, Q. 2015	Tenotomy or tenodesis for long head biceps lesions in shoulders with reparable rotator cuff tears: a prospective randomised trial	Incorrect patient population (patients did not have massive/irreparable tears)
Zhang, Z. 2014	Arthroscopic versus mini-open rotator cuff repair: a prospective, randomized study with 24-month follow-up	*not best available
Zhao, J. G. 2017	Surgical interventions to treat humerus shaft fractures: A network meta-analysis of randomized controlled trials	Meta-analysis
Zhao, J. G. 2015	Platelet-rich plasma in arthroscopic rotator cuff repair: a meta-analysis of randomized controlled trials	Meta-analysis
Zheng, X. Q. 2014	Nonsteroidal anti-inflammatory drugs versus corticosteroid for treatment of shoulder pain: A systematic review and meta-analysis	Systematic review
Ziegler, D. W. 2004	The use of in-office, orthopaedist-performed ultrasound of the shoulder to evaluate and manage rotator cuff disorders	*Not best available (moderate quality)
Zingg, P. O. 2007	Clinical and structural outcomes of nonoperative management of massive rotator cuff tears	Natural history
Zlatkin, M. B. 2004	Assessment of the rotator cuff and glenoid labrum using an extremity MR system: MR results compared to surgical findings from a multi-center study	*Not best available (moderate quality)
Zumstein, M. A. 2011	Problems, complications, reoperations, and revisions in reverse total shoulder arthroplasty: A systematic review	included revisions

Author	Article Title	Reason for Exclusion
Zumstein, Ma 2014	Increased vascularization during early healing after biologic augmentation in repair of chronic rotator cuff tears using autologous leukocyte- and platelet-rich fibrin (L-PRF): a prospective randomized controlled pilot trial	*not best available

## **LETTERS OF ENDORSEMENT FROM EXTERNAL ORGANIZATIONS**



ARTHROSCOPY ASSOCIATION  
OF NORTH AMERICA

9400 W Higgins Rd I Ste 200  
Rosemont, Illinois 60018  
Phone I 847-292-2262  
Fax I 847-292-2268  
**www.aana.org**

March 21, 2019

Kaitlyn S. Sevarino, MBA  
Senior Manager, Quality and Value Implementation  
Department of Research, Quality, & Scientific Affairs  
AAOS  
9400 West Higgins Road  
Rosemont, Illinois 60018

Dear Ms. Sevarino:

The Arthroscopy Association of North America has voted to endorse the AAOS Management of Rotator Cuff Injuries. This endorsement implies permission for the AAOS to officially list our organization as an endorser of this systematic review and reprint our logo in the introductory section of the systematic review document.

Sincerely,

A handwritten signature in black ink, appearing to read "Louis McIntyre".

Louis McIntyre, MD  
President  
Arthroscopy Association of North America



## American Shoulder and Elbow Surgeons

April 1, 2019

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*Executive Director*

Kaitlyn S. Sevarino, MBA  
Senior Manager, Quality and Value Implementation  
Department of Research, Quality, & Scientific Affairs

Dear Ms. Sevarino,

The American Shoulder and Elbow Surgeons has voted to endorse the AAOS Management of Rotator Cuff Injuries. This endorsement implies permission for the AAOS to officially list our organization as an endorser of this systematic review and reprint our logo in the introductory section of the systematic review document.

Sincerely,

Frank Cordasco, MD, MS  
President

Cc: ASES Presidential Line

Jed Kuhn, MD

Leesa Galatz, MD

Surena Namdari, MD

Anna K. Quintanilla, MA, CAE

9400 W. Higgins Road, Suite 500, Rosemont, Illinois 60018-4976

Phone: (847) 698-1629 • Fax: (847) 268-9499

April 16, 2019

Kaitlyn S. Sevarino, MBA  
Senior Manager, Quality and Value Implementation  
Department of Research, Quality, & Scientific Affairs

Dear Ms. Sevarino,

The Board of Directors of the American Orthopaedic Society for Sports Medicine (AOSSM) has voted to endorse the AAOS Management of Rotator Cuff Injuries Clinical Practice Guideline. This endorsement implies permission for the AAOS to officially list our organization as an endorser of this systematic review and reprint our logo in the introductory section of the systematic review document.

Best regards,



Neal ElAttrache, MD  
AOSSM President

cc: Kevin Boyer, AOSSM Director of Research



9400 Higgins Road, Suite 300  
Rosemont, IL 60018  
847/292-4900

**sportsmed.org**



Kaitlyn S. Sevarino, MBA  
Senior Manager, Quality and Value  
Implementation Department of Research,  
Quality, & Scientific Affairs

May 31, 2019

Dear Ms. Sevarino,

The American Society of Shoulder and Elbow Therapists has voted to endorse the AAOS Management of Rotator Cuff Injuries. This endorsement implies permission for the AAOS to officially list our organization as an endorser of this systematic review and reprint our logo in the introductory section of the systematic review document.

Respectfully,

A handwritten signature in black ink that reads "June Kennedy". The signature is fluid and cursive, with the first and last names clearly legible.

June Kennedy, MS PT  
ASSET President

1111 North Fairfax Street  
Alexandria, VA 22314-1488  
703/684-2782  
www.apta.org

Kaitlyn S. Sevarino, MBA  
Senior Manager, Quality and Value  
Implementation Department of Clinical Quality  
and Value

Dear Ms. Sevarino,

The American Physical Therapy Association has voted to endorse the AAOS Clinical Practice Guideline of the Management of Rotator Cuff Injuries. This endorsement implies permission for the AAOS to officially list our organization as an endorser of this clinical practice guideline and reprint our logo in the introductory section of the systematic review document.

Sincerely,



Sharon Dunn, PT, PhD  
Board Certified Orthopaedic  
Specialist President  
American Physical Therapy Association