

Supplemental Online Content

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

eTable 1. Explanation of the Components of the GRADE Tool and How They Were Assessed.

Grading of the certainty of evidence was performed separately for each outcome measure and for each follow up time period for each comparison of interventions. *ER ROM*, external rotation range of movement; *VAS*, visual analogue scale

GRADE sub-component	Method of assessment
Overall risk of bias	Certainty of evidence was downgraded if the “high overall risk” studies contributed to more than 50% of the weight in the pairwise meta-analysis.
Imprecision of results	Assessed with the optimal information size. This was tested by performing a conventional sample size calculation; if the total number of patients in the included comparisons was lower than that generated by the sample size calculation, the evidence was downgraded. A minimum of 59, 45 and 81 participants were required in each treatment group to detect a minimal clinically relevant difference (MRCD) of 1 point in VAS pain, 10 points in functional scales and 10 degrees in ER ROM respectively at a confidence of 95% (type I error) and power of 80% (type II error)
Inconsistency of evidence	Inconsistency was assessed with tests for heterogeneity (Tau ² , Chi ² and I ² tests). Where the inconsistency index defined the heterogeneity as greater than 50% (substantial), sensitivity analyses were performed to identify and remove the studies that were responsible for the inconsistency where possible and the data were re-analysed. No more than one study from each comparison could be removed. Where not possible or in comparisons with 3 or less studies, the evidence was downgraded by one step. Where the I ² statistic was greater than 75% the meta-analysis was abandoned.
Indirectness of evidence	Assessed by the compared interventions, included populations and outcome measures. Where those were considered to be non-clinically relevant and where there was thought to be significant diversity in the included populations of the compared groups with regard to a) inclusion of patients with specific conditions (e.g. diabetics), b) duration of symptoms and c) home exercise the evidence was downgraded.
Other	Publication bias assessed by the construction of funnel plots where 10 or more studies were included in the same pairwise meta-analysis.

eTable 2a. Risk of Bias Assessment for Patient-Reported Outcomes (pain, function).

?, unclear risk

First Author (year)	Internal Validity (Cochrane’s Collaboration Tool for Assessing Risk of Bias)							
	Selection bias		Performance bias	Detection bias	Attrition bias	Reporting bias	Other	Overall Risk
	Random sequence generation	Allocation concealment	Blinding of patients and staff	Blinding of outcome measures	Completeness of outcome data	Selective reporting		
Arslan et al. (2001)	?	?	High	High	Low	High	High	High
Bal et al. (2008)	Low	?	High	High	High	Low	Low	High
Binder et al. (1986)	?	?	High	High	Low	High	Low	High
Blockey et al. (1954)	?	?	?	?	High	High	High	High
Buchbinder et al. (2004a)	Low	Low	Low	Low	Low	Low	High	Low
Buchbinder et al. (2004b)	Low	Low	Low	Low	Low	Low	Low	Low
Bulgen at al. (1984)	?	?	High	High	Low	High	Low	High
Calis et al. (2006)	?	?	High	High	Low	Low	Low	Low
Carette et al. (2003)	Low	Low	Low	Low	Low	Low	Low	Low
Cheing et al. (2008)	?	High	High	High	Low	Low	High	High
	Internal Validity							

First Author (year)	(Cochrane's Collaboration Tool for Assessing Risk of Bias)							
	<i>Selection bias</i>		<i>Performance bias</i>	<i>Detection bias</i>	<i>Attrition bias</i>	<i>Reporting bias</i>	<i>Other</i>	<i>Overall Risk</i>
	<i>Random sequence generation</i>	<i>Allocation concealment</i>	<i>Blinding of patients and staff</i>	<i>Blinding of outcome measures</i>	<i>Completeness of outcome data</i>	<i>Selective reporting</i>		
Chen et al. (2014)	Low	Low	High	High	Low	?	Low	Low
Cho et al. (2016)	Low	?	High	High	High	low	Low	High
Dacre et al. (1989)	?	?	?	?	High	High	Low	Unclear
Dahan et al. (1999)	Low	Low	Low	Low	Low	Low	High	Low
De Carli et al. (2012)	?	?	High	High	Low	High	?	High
Dehghan et al. (2013)	Low	?	High	High	High	High	Low	High
Gallacher et al. (2018)	Low	High	High	High	Low	High	Low	High
Gam et al. (1998)	Low	High	High	High	Low	Low	Low	High
Hsieh et al. (2012)	Low	?	High	High	Low	Low	High	High
Jacobs et al. (1991)	?	?	High	High	High	Low	High	High
Jacobs et al. (2009)	?	Low	High	High	Low	High	Low	High

First Author (year)	Internal Validity (Cochrane's Collaboration Tool for Assessing Risk of Bias)							
	<i>Selection bias</i>		<i>Performance bias</i>	<i>Detection bias</i>	<i>Attrition bias</i>	<i>Reporting bias</i>	<i>Other</i>	<i>Overall Risk</i>
	<i>Random sequence generation</i>	<i>Allocation concealment</i>	<i>Blinding of patients and staff</i>	<i>Blinding of outcome measures</i>	<i>Completeness of outcome data</i>	<i>Selective reporting</i>		
Jones & Chattopadhyay (1999)	?	Low	High	High	Low	High	High	High
Khallaf et al. (2018)	?	?	High	High	?	High	High	High
Khan et al. (2005)	Low	High	High	High	High	?	High	High
Kim et al. (2017)	Low	?	?	?	High	Low	Low	Unclear
Kivimäki & Pohjolainen (2001)	?	?	High	?	High	High	High	High
Kivimäki et al. (2007)	Low	Low	High	High	High	High	?	High
Klc et al. (2015)	Low	Low	High	High	Low	Low	High	High
Koh et al. (2013)	Low	?	High	High	Low	?	Low	Low
Kraal et al. (2018)	Low	Low	?	?	High	Low	Low	Low
Lee et al. (1974)	?	?	High	?	?	High	High	High

First Author (year)	Internal Validity (Cochrane's Collaboration Tool for Assessing Risk of Bias)							
	<i>Selection bias</i>		<i>Performance bias</i>	<i>Detection bias</i>	<i>Attrition bias</i>	<i>Reporting bias</i>	<i>Other</i>	<i>Overall Risk</i>
	<i>Random sequence generation</i>	<i>Allocation concealment</i>	<i>Blinding of patients and staff</i>	<i>Blinding of outcome measures</i>	<i>Completeness of outcome data</i>	<i>Selective reporting</i>		
Lee et al. (2017a)	Low	?	?	?	Low	Low	Low	Unclear
Lee et al. (2017b)	?	?	High	High	?	High	High	High
Lim et al. (2014)	Low	Low	?	?	?	High	Low	Unclear
Lo et al. (2020)	?	High	?	High	?	?	High	High
Lorbach et al. (2010)	?	?	High	High	Low	Low	Low	Low
Ma et al. (2006)	?	?	High	High	Low	?	High	High
Maryam et al. (2012)	?	?	High	High	High	High	High	High
Mukherjee et al. (2017)	Low	?	High	High	Low	Low	?	Low
Mun & Baek (2016)	Low	Low	High	High	Low	Low	Low	Low
Oh et al. (2011)	Low	Low	?	?	Low	High	Low	Low
Park & Hwnag (2000)	High	High	High	High	Low	Low	Low	High

First Author (year)	Internal Validity (Cochrane's Collaboration Tool for Assessing Risk of Bias)							
	<i>Selection bias</i>		<i>Performance bias</i>	<i>Detection bias</i>	<i>Attrition bias</i>	<i>Reporting bias</i>	<i>Other</i>	<i>Overall Risk</i>
	<i>Random sequence generation</i>	<i>Allocation concealment</i>	<i>Blinding of patients and staff</i>	<i>Blinding of outcome measures</i>	<i>Completeness of outcome data</i>	<i>Selective reporting</i>		
Park et al. (2013)	Low	?	Low	Low	Low	Low	Low	Low
Park et al. (2014)	?	High	High	High	?	Low	High	High
Park et al. (2015)	?	?	High	High	?	High	High	High
Prestgaard et al. (2015)	Low	Low	High	High	Low	Low	Low	Low
Pushpasekaran et al. (2017)	?	?	High	High	?	High	Low	High
Quraishi et al. (2007)	Low	?	High	High	Low	High	High	High
Ranalletta et al (2015)	Low	?	High	High	low	low	Low	Low
Reza et al (2013)	?	Low	Low	Low	Low	Low	Low	Low
Rizk et al (1991)	?	?	High	High	High	High	Low	High
Roh et al (2011)	Low	Low	High	High	High	Low	Low	High

First Author (year)	Internal Validity (Cochrane's Collaboration Tool for Assessing Risk of Bias)							
	<i>Selection bias</i>		<i>Performance bias</i>	<i>Detection bias</i>	<i>Attrition bias</i>	<i>Reporting bias</i>	<i>Other</i>	<i>Overall Risk</i>
	<i>Random sequence generation</i>	<i>Allocation concealment</i>	<i>Blinding of patients and staff</i>	<i>Blinding of outcome measures</i>	<i>Completeness of outcome data</i>	<i>Selective reporting</i>		
Rouhani et al. (2016)	Low	?	Low	Low	Low	Low	Low	Low
Ryans et al. (2005)	Low	Low	High	High	Low	High	Low	High
Schroder et al. (2017)	Low	Low	Low	Low	Low	Low	Low	Low
Schydrowsky et al (2012)	?	Low	High	High	High	High	High	High
Sharma et al. (2016)	Low	Low	Low	Low	Low	Low	Low	Low
Shin & Lee (2013)	Low	Low	High	High	High	Low	?	High
Sun et al. (2001)	?	?	High	High	Low	Low	Low	Low
Sun et al. (2018)	?	Low	?	Low	Low	High	Low	Low
Tveita et al. (2008)	Low	Low	High	High	Low	Low	?	Low
Vahdatpour et al. (2014)	Low	?	Low	?	Low	High	High	Low
van der Windt et al. (1997)	Low	?	High	High	Low	High	High	High

First Author (year)	Internal Validity (Cochrane's Collaboration Tool for Assessing Risk of Bias)							
	<i>Selection bias</i>		<i>Performance bias</i>	<i>Detection bias</i>	<i>Attrition bias</i>	<i>Reporting bias</i>	<i>Other</i>	<i>Overall Risk</i>
	<i>Random sequence generation</i>	<i>Allocation concealment</i>	<i>Blinding of patients and staff</i>	<i>Blinding of outcome measures</i>	<i>Completeness of outcome data</i>	<i>Selective reporting</i>		
Widiastuti-Samekto & Sianturi (2004)	Low	?	?	?	Low	Low	High	Unclear
Yoon et al. (2016)	Low	Low	Low	Low	Low	Low	Low	Low

eTable 2b. Risk of Bias Assessment for Non–Patient-Reported Outcomes (External Rotation Range of Movement)

First Author (year)	Internal Validity (Cochrane’s Collaboration Tool for Assessing Risk of Bias)							
	<i>Selection bias</i>		<i>Performance bias</i>	<i>Detection bias</i>	<i>Attrition bias</i>	<i>Reporting bias</i>	<i>Other</i>	<i>Overall Risk</i>
	<i>Random sequence generation</i>	<i>Allocation concealment</i>	<i>Blinding of patients and staff</i>	<i>Blinding of outcome measures</i>	<i>Completeness of outcome data</i>	<i>Selective reporting</i>		
Arslan et al. (2001)	?	?	High	?	Low	High	High	High
Bal et al. (2008)	Low	?	High	Low	High	Low	Low	Low
Binder et al. (1986)	?	?	High	Low	Low	High	Low	Low
Blockey et al. (1954)	?	?	?	Low	High	High	High	High
Buchbinder et al. (2004a)	Low	Low	Low	Low	Low	Low	High	Low
Buchbinder et al. (2004b)	Low	Low	Low	Low	Low	Low	Low	Low
Bulgen at al. (1984)	?	?	High	?	Low	High	Low	Unclear
Calis et al. (2006)	?	?	High	High	Low	Low	Low	Low
Carette et al. (2003)	Low	Low	Low	Low	Low	Low	Low	Low
Cheing et al. (2008)	?	High	High	High	Low	Low	High	High

First Author (year)	Internal Validity (Cochrane's Collaboration Tool for Assessing Risk of Bias)							
	<i>Selection bias</i>		<i>Performance bias</i>	<i>Detection bias</i>	<i>Attrition bias</i>	<i>Reporting bias</i>	<i>Other</i>	<i>Overall Risk</i>
	<i>Random sequence generation</i>	<i>Allocation concealment</i>	<i>Blinding of patients and staff</i>	<i>Blinding of outcome measures</i>	<i>Completeness of outcome data</i>	<i>Selective reporting</i>		
Chen et al. (2014)	Low	Low	High	Low	Low	?	Low	Low
Cho et al. (2016)	Low	?	High	low	High	low	Low	Low
Dacre et al. (1989)	?	?	?	Low	High	High	Low	Unclear
Dahan et al. (1999)	Low	Low	Low	Low	Low	Low	High	Low
De Carli et al. (2012)	?	?	High	?	Low	High	?	Unclear
Dehghan et al. (2013)	Low	?	High	?	High	High	Low	High
Gallacher et al. (2018)	Low	High	High	High	Low	High	Low	High
Gam et al. (1998)	Low	High	High	High	Low	Low	Low	High
Hsieh et al. (2012)	Low	?	High	Low	Low	Low	High	Low
Jacobs et al. (1991)	?	?	High	Low	High	Low	High	High
Jacobs et al. (2009)	?	Low	High	?	Low	High	Low	Low

First Author (year)	Internal Validity (Cochrane's Collaboration Tool for Assessing Risk of Bias)							
	<i>Selection bias</i>		<i>Performance bias</i>	<i>Detection bias</i>	<i>Attrition bias</i>	<i>Reporting bias</i>	<i>Other</i>	<i>Overall Risk</i>
	<i>Random sequence generation</i>	<i>Allocation concealment</i>	<i>Blinding of patients and staff</i>	<i>Blinding of outcome measures</i>	<i>Completeness of outcome data</i>	<i>Selective reporting</i>		
Jones & Chattopadhyay (1999)	?	Low	High	High	Low	High	High	High
Khallaf et al. (2018)	?	?	High	High	?	High	High	High
Khan et al. (2005)	Low	High	High	High	High	?	High	High
Kim et al. (2017)	Low	?	?	?	High	Low	Low	Unclear
Kivimäki & Pohjolainen (2001)	?	?	High	?	High	High	High	High
Kivimäki et al. (2007)	Low	Low	High	low	High	High	?	High
Klc et al. (2015)	Low	Low	High	Low	Low	Low	High	Low
Koh et al. (2013)	Low	?	High	Low	Low	?	Low	Low
Kraal et al. (2018)	Low	Low	?	?	High	Low	Low	Low
Lee et al. (1974)	?	?	High	?	?	High	High	High

First Author (year)	Internal Validity (Cochrane's Collaboration Tool for Assessing Risk of Bias)							
	<i>Selection bias</i>		<i>Performance bias</i>	<i>Detection bias</i>	<i>Attrition bias</i>	<i>Reporting bias</i>	<i>Other</i>	<i>Overall Risk</i>
	<i>Random sequence generation</i>	<i>Allocation concealment</i>	<i>Blinding of patients and staff</i>	<i>Blinding of outcome measures</i>	<i>Completeness of outcome data</i>	<i>Selective reporting</i>		
Lee et al. (2017a)	Low	?	?	Low	Low	Low	Low	Low
Lee et al. (2017b)	?	?	High	?	?	High	High	High
Lim et al. (2014)	Low	Low	?	Low	?	High	Low	Low
Lo et al. (2020)	?	High	?	High	?	?	High	High
Lorbach et al. (2010)	?	?	High	?	Low	Low	Low	Unclear
Ma et al. (2006)	?	?	High	?	Low	?	High	Unclear
Maryam et al. (2012)	?	?	High	?	High	High	High	High
Mukherjee et al. (2017)	Low	?	High	?	Low	Low	?	Unclear
Mun & Baek (2016)	Low	Low	High	Low	Low	Low	Low	Low
Oh et al. (2011)	Low	Low	?	?	Low	High	Low	Low
Park & Hwnag (2000)	High	High	High	High	Low	Low	Low	High

First Author (year)	Internal Validity (Cochrane's Collaboration Tool for Assessing Risk of Bias)							
	<i>Selection bias</i>		<i>Performance bias</i>	<i>Detection bias</i>	<i>Attrition bias</i>	<i>Reporting bias</i>	<i>Other</i>	<i>Overall Risk</i>
	<i>Random sequence generation</i>	<i>Allocation concealment</i>	<i>Blinding of patients and staff</i>	<i>Blinding of outcome measures</i>	<i>Completeness of outcome data</i>	<i>Selective reporting</i>		
Park et al. (2013)	Low	?	Low	Low	Low	Low	Low	Low
Park et al. (2014)	?	High	High	High	?	Low	High	High
Park et al. (2015)	?	?	High	?	?	High	High	High
Prestgaard et al. (2015)	Low	Low	High	Low	Low	Low	Low	Low
Pushpasekaran et al. (2017)	?	?	High	High	?	High	Low	High
Quraishi et al. (2007)	Low	?	High	Low	Low	High	High	High
Ranalletta et al (2015)	Low	?	High	low	low	low	Low	Low
Reza et al (2013)	?	Low	Low	Low	Low	Low	Low	Low
Rizk et al (1991)	?	?	High	Low	High	High	Low	High
Roh et al (2011)	Low	Low	High	High	High	Low	Low	High

First Author (year)	Internal Validity (Cochrane's Collaboration Tool for Assessing Risk of Bias)							
	<i>Selection bias</i>		<i>Performance bias</i>	<i>Detection bias</i>	<i>Attrition bias</i>	<i>Reporting bias</i>	<i>Other</i>	<i>Overall Risk</i>
	<i>Random sequence generation</i>	<i>Allocation concealment</i>	<i>Blinding of patients and staff</i>	<i>Blinding of outcome measures</i>	<i>Completeness of outcome data</i>	<i>Selective reporting</i>		
Rouhani et al. (2016)	Low	?	Low	Low	Low	Low	Low	Low
Ryans et al. (2005)	Low	Low	High	Low	Low	High	Low	Low
Schroder et al. (2017)	Low	Low	Low	Low	Low	Low	Low	Low
Schydrowsky et al (2012)	?	Low	High	High	High	High	High	High
Sharma et al. (2016)	Low	Low	Low	Low	Low	Low	Low	Low
Shin & Lee (2013)	Low	Low	High	Low	High	Low	?	Low
Sun et al. (2001)	?	?	High	Low	Low	Low	Low	Low
Sun et al. (2018)	?	Low	?	Low	Low	High	Low	Low
Tveita et al. (2008)	Low	Low	High	High	Low	Low	?	Low
Vahdatpour et al. (2014)	Low	?	Low	?	Low	High	High	Low
van der Windt et al. (1998)	Low	?	High	Low	Low	High	High	High

First Author (year)	Internal Validity (Cochrane's Collaboration Tool for Assessing Risk of Bias)							
	<i>Selection bias</i>		<i>Performance bias</i>	<i>Detection bias</i>	<i>Attrition bias</i>	<i>Reporting bias</i>	<i>Other</i>	<i>Overall Risk</i>
	<i>Random sequence generation</i>	<i>Allocation concealment</i>	<i>Blinding of patients and staff</i>	<i>Blinding of outcome measures</i>	<i>Completeness of outcome data</i>	<i>Selective reporting</i>		
Widiastuti-Samekto & Sianturi (2004)	Low	?	?	Low	Low	Low	High	Low
Yoon et al. (2016)	Low	Low	Low	Low	Low	Low	Low	Low

eTable 3. Results of Comparisons of Interventions Assessed by Fewer Than 3 Studies and Were Not Pooled Qualitatively or Quantitatively

Treatment modes	First author (year)	Pain	Functional Disability (SPADI/DASH)	Function (Constant/HAQ/SST)	ROM ER	ROM ABD	ROM FL	Satisfaction
Arthrographic distension + IA Corticosteroid vs placebo/no treatment	Buchbinder et al. (2004b)	↓ 3w ↔ 6w, 12w	↓ 3w ↔ 6w, 12w	-	↔ 3w, 6w, 12w	↑ 3w ↔ 6w, 12w	↔ 3w, 6w, 12w	-
	Sharma et al. (2016)	↓ 4w, 8w	↑ 4w, 8w ↔ 12m	-	↑ 4w, 8w	↑ 4w, 8w	-	-
Arthrographic distension + IA Corticosteroid vs Arthrographic distension	Jacobs et al. (1991)	-	-	-	↔ 4m	↑ 4m	↑ 4m	-
Arthrographic distension vs IA Corticosteroid	Jacobs et al. (1991)	-	-	-	↔ 4m	↓ 4m	↓ 4m	-
Arthrographic distension + IA Sodium Hyaluronate vs IA Corticosteroid	Park et al. (2013)	↔ 2w, 6w	↔ 2w, 6w	-	↑ 2w, 6w	↔ 2w, 6w	↔ 2w, 6w	-
Arthrographic distension + IA Corticosteroid + Physiotherapy vs Physiotherapy	Khan et al. (2005)	↔ 8w	-	-	↑ 8w	↑ 8w	-	-
	Park et al. (2014)	↔ 4w	↔ 4w	↔ 4w	↔ 4w	↔ 4w	↔ 4w	-
Arthrographic distension + IA Corticosteroid vs SA Corticosteroid	Yoon et al. (2016)	↑ 4w ↔ 12w, 6m	-	↑ 4w, 12w ↔ 6m	↑ 4w ↔ 12w, 6m	-	↑ 4w ↔ 12w, 6m	-
Arthrographic distension + MUA vs IA Corticosteroid	Mun & Baek (2016)	↓ 2w, 6w, 12w ↔ 6m, 12m	-	↑ 2w, 6w, 12w ↔ 6m, 12m	↑ 2w, 6w ↔ 12w, 6m, 12m	-	↑ 2w, 6w ↔ 12w, 6m, 12m	↑ 2w, 6w, 12w ↔ 6m, 12m

Arthrographic distension vs MUA + IA Corticosteroid	Quraishi et al. (2007)	↓ 8w, 6m	-	↑ 8w, 6m	↔ 8w, 6m	↔ 8w, 6m	↔ 8w, 6m	-
Treatment modes	First author (year)	Pain	Functional Disability (SPADI/DASH)	Function (Constant/HAQ/SST)	ROM ER	ROM ABD	ROM FL	Satisfaction
Arthrographic distension + IA Corticosteroid vs ACR + IA Corticosteroid	Gallacher et al. (2018)	-	-	↔ 6w ↓ 12w, 6m	↓ 6w, 12w, 6m	↔ 6m	↓ 6m	↔ 6w, 12w, 6m
Arthrographic distension + IA Corticosteroid + Physiotherapy vs Arthrographic distension + IA Corticosteroid	Park et al. (2014)	↓ 4w	↓ 4w	↑ 4w	↑ 4w	↑ 4w	↑ 4w	-
Arthrographic distension + IA Corticosteroid vs Physiotherapy	Park et al. (2014)	↑ 4w	↔ 4w	↓ 4w	↓ 4w	↓ 4w	↓ 4w	-
PO Corticosteroid vs ESWT	Chen et al. (2014)	↔ 2w, 4w, 6w, 12w	-	↔ 2w ↓ 4w, 6w, 12w	↔ 2w, 4w ↓ 6w, 12w	↔ 2w, 4w ↓ 6w, 12w	↔ 2w ↓ 4w, 6w, 12w	-
Rotator interval Corticosteroid vs SA Corticosteroid	Sun et al. (2018)	↓ 4w, 8w, 12w	↓ 4w, 8w, 12w	↑ 4w, 8w, 12w	↑ 4w, 8w, 12w	↑ 4w, 8w, 12w	↑ 4w, 8w, 12w	-
Rotator interval Corticosteroid vs IA Corticosteroid	Sun et al. (2018)	↓ 4w, 8w, 12w	↓ 4w, 8w, 12w	↑ 4w, 8w, 12w	↑ 4w, 8w, 12w	↑ 4w, 8w, 12w	↑ 4w, 8w, 12w	-
IA Corticosteroid + Physiotherapy vs Long Head of Biceps Corticosteroid + Physiotherapy	Lee et al (1974)	-	-	-	↔ 1w, 3w, 4w, 5w, 6w ↑ 2w	↔ 1w, 3w, 4w, 5w, 6w ↑ 2w	-	-

IA + Rotator Interval Corticosteroid vs IA Corticosteroid	Prestgaard et al (2015)	↔ 3w, 6w, 12w, 6m	↔ 3w, 6w, 12w, 6m	-	↔ 3w, 6w, 12w, 6m	↔ 3w, 6w, 12w, 6m	↔ 3w, 6w, 12w, 6m	↔ 3w, 6w, 12w, 6m
Treatment modes	First author (year)	Pain	Functional Disability (SPADI/DASH)	Function (Constant/HAQ/SST)	ROM ER	ROM ABD	ROM FL	Satisfaction
IA + Rotator Interval Corticosteroid vs no treatment	Prestgaard et al (2015)	↓ 6w, 12w ↔ 3w, 6m	↓ 3w, 6w, 12w ↔ 6m	-	↔ 3w, 6w, 12w, 6m	↑ 12w ↔ 3w, 6w, 6m	↑ 3w, 6w ↔ 12w, 6m	↑ 12w ↔ 3w, 6w, 6m
Long Head of Biceps Corticosteroid + Physiotherapy vs Analgesia	Lee et al (1974)	-	-	-	↑ 1w, 2w, 3w, 4w, 5w, 6w	↑ 1w, 2w, 3w, 4w, 5w, 6w	-	-
IA + SA Corticosteroid vs no treatment	Shin & Lee (2013)	↓ 2w, 4w, 8w, 4m ↔ 6m	-	↑ 2w, 4w, 8w, 4m	↑ 2w, 4w, 8w, 4m	-	↑ 2w, 4w, 8w, 4m ↔ 6m	↑ 2w, 4w, 8w, 4m ↔ 6m
IA Corticosteroid vs IA + SA Corticosteroid	Shin & Lee (2013)	↔ 2w, 4w, 8w, 4m, 6m	-	↔ 2w, 4w, 8w, 4m, 6m	↔ 2w, 4w, 8w, 4m, 6m	-	↔ 2w, 4w, 8w, 4m, 6m	↔ 2w, 4w, 8w, 4m, 6m
	Cho et al (2016)	↔ 12w	-	↔ 12w	↔ 12w	↔ 12w	↔ 12w	-
SA Corticosteroid vs IA + SA Corticosteroid	Shin & Lee (2013)	↔ 2w, 4w, 8w, 4m, 6m	-	↔ 2w, 4w, 8w, 4m, 6m	↔ 2w, 4w, 8w, 4m, 6m	-	↔ 2w, 4w, 8w, 4m, 6m	↔ 2w, 4w, 8w, 4m, 6m
	Cho et al (2016)	↓ 12w	-	↑ 12w	↔ 12w	↔ 12w	↔ 12w	-
SA Corticosteroid vs no treatment	Shin & Lee (2013)	↓ 2w, 4w, 8w, 4m ↔ 6m	-	↑ 2w, 4w, 8w, 4m ↔ 6m	↑ 2w, 4w, 8w, 4m ↔ 6m	-	↑ 2w, 4w, 8w, 4m ↔ 6m	↑ 2w, 4w, 8w, 4m ↔ 6m
	Rizk et al. (1991)	↔ 1-11w, 4m, 6m	-	-	-	-	-	-

IA Corticosteroid vs three-site Corticosteroid	Pushpasekaran et al. (2017)	↑ 3w, 6w ↔ 6m	-	↓ 3w, 6w, 6m	-	-	-	-
Treatment modes	First author (year)	Pain	Functional Disability (SPADI/DASH)	Function (Constant/HAQ/SST)	ROM ER	ROM ABD	ROM FL	Satisfaction
IA Corticosteroid vs PO Corticosteroid	Lorbach et al (2010)	↔ 4w, 8w, 12w, 6m, 12m	-	↑ 4w, 8w, 12w, 6m, 12m	↑ 4w, 8w ↔ 12w, 6m, 12m	↑ 8w, 6m, 12m ↔ 4w, 12w	↑ 4w, 8w, 12w ↔ 6m, 12m	-
IA Corticosteroid + Physiotherapy vs PO Corticosteroid + Physiotherapy	Widiastuti-Samekto & Sianturi (2003)	↓ 1w ↔ 2w, 3w	-	-	-	-	-	-
PO Corticosteroid vs Placebo/no treatment	Blockey et al (1954)	↔ 4m	-	-	-	NS	-	-
	Buchbinder et al (2004a)	↓ 3w ↔ 6w ↑ 12w	↓ 3w ↔ 6w ↑ 12w	↑ 3w ↔ 6w ↓ 12w	↔ 3w, 6w, 12w	↑ 3w ↔ 6w ↓ 12w	↑ 3w ↔ 6w ↓ 12w	↔ 3w, 6w, 12w
	Binder et al. (1986)	↔ 2w, 4w, 6w, 12w, 5m, 6m, 7m, 8m	-	-	↔ 2w, 4w, 6w, 12w, 5m, 6m, 7m, 8m	↔ 2w, 4w, 6w, 12w, 5m, 6m, 7m, 8m	↔ 2w, 4w, 6w, 12w, 5m, 6m, 7m, 8m	-
IA Sodium hyaluronate vs Physiotherapy	Calis et al (2006)	↔ 2w, 12w	-	↓ 2w ↔ 12w	↓ 2w, 12w	↓ 2w ↔ 12w	-	-
IA Sodium hyaluronate vs IA Corticosteroid	Calis et al (2006)	↔ 2w, 12w	-	↔ 2w, 12w	↔ 2w, 12w	↔ 2w, 12w	-	-
IA Sodium hyaluronate vs no treatment	Calis et al (2006)	↔ 2w, 12w	-	↔ 2w ↑ 12w	↔ 2w, 12w	↔ 2w, 12w	-	-

IA Sodium hyaluronate + IA Tramadol vs IA Sodium Hyaluronate	Kim et al. (2017)	↓ 1w, 2w ↔ 3w, 4w, 6w	↔ 1w, 2w, 3w, 4w, 6w	↔ 1w, 2w, 3w, 4w, 6w	↔ 1w, 2w, 3w, 4w, 6w	↔ 1w, 2w, 3w, 4w, 6w	-	-
Treatment modes	First author (year)	Pain	Functional Disability (SPADI/DASH)	Function (Constant/HAQ/SST)	ROM ER	ROM ABD	ROM FL	Satisfaction
IA Sodium Hyaluronate + Physiotherapy vs Physiotherapy	Hsieh et al. (2012)	↔ 6w, 12w	↔ 6w, 12w	-	↔ 6w, 12w	↔ 6w, 12w	↔ 6w, 12w	↔ 6w, 12w
IA Corticosteroid vs IA Sodium Hyaluronate	Lim et al (2014)	↔ 2w, 12w	-	↔ 2w, 12w	↔ 12w	-	↔ 12w	-
IA Corticosteroid vs Adilubimab	Schydrowsky et al (2012)	-	↔ 2w, 4w, 8w, 12w, 6m	↔ 2w, 4w, 8w, 12w, 6m	↔ 2w, 4w, 8w, 12w, 6m	↔ 2w, 4w, 8w, 12w, 6m	↔ 2w, 4w, 8w, 12w, 6m	-
Suprascapular nerve block vs Placebo	Dahan et al. (1999)	↔ 4w	↔ 4w		↔ 4w	↔ 4w	↔ 4w	-
Suprascapular nerve block vs IA Corticosteroid	Jones & Chattopadhyay (1999)	↓ 12w	-	-	↑ 12w	↑ 12w	-	-
Suprascapular nerve block + Physiotherapy vs Physiotherapy (+/- placebo)	Dahan et al. (2000)	↓ 4w	-	↔ 4w	↔ 4w	↔ 4w	↔ 4w	-
	Klc et al. (2015)	↓ 3w, 7w	-	↑ 3w ↔ 7w	-	-	-	-
Intranasal calcitonin + Physiotherapy vs intranasal Placebo + Physiotherapy	Rouhani et al. (2016)	↓ 6w	↑ 6w		↑ 6w	↑ 6w	↑ 6w	↑ 6w
MUA + ACR vs IA Corticosteroid + Physiotherapy	De Carli et al. (2012)	-	-	↔ 6w, 12m	↔ 6w, 12m	↔ 6w, 12m	↔ 6w, 12m	-

MUA vs IA Corticosteroid + Arthrographic distension	Jacobs et al. (2009)	↔ 2w, 6w, 12w, 4m	-	↔ 2w, 6w, 12w, 4m	-	-	-	↔ 2w, 6w, 12w, 4m
Treatment modes	First author (year)	Pain	Functional Disability (SPADI/DASH)	Function (Constant/HAQ/SST)	ROM ER	ROM ABD	ROM FL	Satisfaction
MUA + IA Corticosteroid vs MUA	Kivimäki & Pohjolainen (2001)	-	-	-	↔ 4m	↔ 4m	↔ 4m	-
MUA vs no treatment	Kivimäki et al. (2007)	↔ 6w, 12w, 6m, 12m	↔ 6w, 12w, 6m, 12m	↔ 6w, 12w, 6m, 12m	↔ 6w, 12w, 6m, 12m	↔ 6w, 12w, 6m, 12m	↔ 6w 6m, 12m ↑ 12w	-
ACR vs IA Corticosteroid	Mukherjee et al. (2017)	↔ 4w ↓ 8w, 12w, 4m, 5m	-	↑ 4w, 8w, 12w, 4m, 5m	↑ 4w, 8w, 12w, 4m, 5m	↑ 4w, 8w, 12w, 4m, 5m	↑ 4w, 8w, 12w, 4m, 5m	-
Acupuncture + Physiotherapy vs Acupuncture	Ma et al. (2006)	↓ 4w	-	-	↔ 4w	↔ 4w	↔ 4w	-
Acupuncture vs physiotherapy	Cheing et al. (2008)	↔ 4w, 12w, 6m	-	↔ 4w, 12w, 6m	-	-	-	-
	Ma et al. (2006)	↓ 4w	-	-	↔ 4w	↔ 4w	↔ 4w	-
Acupuncture vs sham acupuncture/no treatment	Cheing et al. (2008)	↓ 4w	-	↑ 4w	-	-	-	-
	Schroder et al. (2017)	↓(post session)	-	↔ (post session)	-	-	-	-
	Sun et al. (2001)	-	-	↑ 6w, 5m	-	-	-	-

ACR, arthroscopic capsular release; ESWT, extracorporeal shock wave therapy; IA, intra-articular; m, months; MUA, manipulation under anaesthesia; PO, per oral; SA, subacromial; w; weeks

eTable 4. Results of Grading of the Certainty of Evidence According to the GRADE Tool for Each Comparison of Interventions

Comparison	Outcome measure	Number of studies	Overall risk of bias	Inconsistency	Indirectness	Imprecision	Other	Strength of Evidence
Arthrographic distension + IA Corticosteroid vs IA Corticosteroid only	Pain	4 EST	Low	Low	Low	Low	Low	High EST
		5 LST						High LST
	Functional Disability	3 EST	Low	High EST	Low	Low	Low	Mod EST
4 LST		Low LST		High LST				
ROM ER	3 EST	Low	Low	Low	Low	Low	Low	High EST
	5 LST							High LST
Physiotherapy vs no treatment/placebo	ROM ER	4 EST	Low	Low	Low	High	Low	Mod EST
IA Corticosteroid vs IA Placebo/No treatment	Pain	11 EST	Low EST	Low EST	Low	Low	Low (Funnel plots for EST and LST)	High EST
		10 LST	Low LST	High LST				Mod LST
		7 MT	High MT	Low MT				Mod MT
Functional Disability	9 EST	Low EST	High EST	Low	Low		Mod EST	
	8 LST	Low LST	High LST				Mod LST	
	5 MT	High MT	Low MT				Mod MT	

	ROM ER	11 EST	Low EST	Low	Low	Low	Low	High EST	
Comparison	Outcome measure	Number of studies	Overall risk of bias	Inconsistency	Indirectness	Imprecision	Other	Strength of Evidence	
		11 LST 7 MT	Low LST High MT				(Funnel plots for EST and LST)	High LST Mod MT	
IA Corticosteroid + Physiotherapy vs IA Placebo/no treatment	ER ROM	3 EST	Low	Low	Low	Low	Low	High EST	
IA Corticosteroid vs Physiotherapy	Pain	7 EST	High EST	Low EST				MOD EST	
		4 LST	Low LST	Low LST	Low	Low	Low	High LST	
		5 MT	High MT	High MT				LOW MT	
	Functional Disability	5 EST	High EST	Low EST					MOD EST
		3 LST	Low LST	High LST	Low	Low	Low	Low	MOD LST
		4 MT	High MT	Low MT					MOD MT
	ROM ER	6 EST	Low EST	High EST					MOD EST
		4 LST	Low LST	Low LST	Low	Low	Low	Low	HIGH LST
		4 MT	High MT	Low MT					MOD MT

Comparison	Outcome measure	Number of studies	Overall risk of bias	Inconsistency	Indirectness	Imprecision	Other	Strength of Evidence
IA Corticosteroid + Physiotherapy vs IA Corticosteroid only	Pain	4 EST 5 MT	High	Low	Low	Low	Low	MOD EST MOD MT
	Functional Disability	4 EST 4 MT	High EST Low MT	Low	Low	High EST Low MT	Low	LOW EST HIGH MT
	ROM ER	4 EST 4 MT	Low	High EST Low MT	Low	Low	Low	MOD EST HIGH MT
IA Corticosteroid + Physiotherapy vs Physiotherapy only	Pain	4 EST 4 MT	High	Low	Low		Low	MOD EST MOD MT
	Functional Disability	3 EST 3 MT	High	Low	Low	High	Low	LOW EST LOW MT
	ROM ER	4 EST 3 MT	High EST Low MT	Low	Low	Low	Low	MOD EST HIGH MT
IA Corticosteroid vs SA Corticosteroid	Pain	6 EST 7 LST	Low EST High LST	High EST Low LST	Low	Low	Low	MOD EST MOD LST

		3 MT	Low MT	High MT				MOD MT
Comparison	Outcome measure	Number of studies	Overall risk of bias	Inconsistency	Indirectness	Imprecision	Other	Strength of Evidence
IA Corticosteroid vs SA Corticosteroid	Function	5 EST	Low	Low	Low	Low	Low	HIGH EST
		6 LST						HIGH LST
Acupuncture + Physiotherapy vs Physiotherapy only (+/- placebo)	Pain	3 EST	High	Low	Low	High	Low	LOW EST
		3 EST						HIGH EST
ESWT + Physiotherapy vs Physiotherapy only (+/- sham ESWT)	Pain	3 EST	High	Too high	Low	High	Low	Meta-analysis abandoned

Each outcome measure and each follow up time period graded separately

ER ROM, external rotation range of movement; EST, early short-term (2-6 weeks); ESWT, extracorporeal shock wave therapy; IA, intra-articular; LST, late short-term (8-12 weeks); MT, mid-term (4-6 months); SA, subacromial.

eTable 5. Results of Statistical Inconsistency Assessment for Each Pairwise Meta-analysis

Comparison	Outcome Measure	Follow up time period	I ²	Study removed after sensitivity analysis	I ²
IA Corticosteroid vs No Treatment/Placebo	Pain	Early short-term	46%	-	-
		Late short-term	80%	Rizk et al. (1991)	72%
		Mid-term	72%	Prestgaard et al. (2015)	48%
	Function	Early short-term	83%	Ranalletta et al (2015)	64%
		Late short-term	81%	Ranalletta et al (2015)	52%
		Mid-term	0%	-	-
	ER ROM	Early short-term	20%	-	-
		Late short-term	53%	Ranalletta et al (2015)	48%
		Mid-term	31%	-	-
Physiotherapy vs No Treatment/Placebo	ER ROM	Early short-term	95%	Carette et al. (2003)	47%
IA Corticosteroid + Physiotherapy vs No Treatment/Placebo	ER ROM	Early short-term	0%	-	-
IA Corticosteroid vs Physiotherapy	Pain	Early short-term	56%	Van der Windt et al. (1998)	23%
		Late short-term	22%	-	-
		Mid-term	66%	-	-

	Function	Early short-term	66%	Calis et al. (2006)	0%
Comparison	Outcome Measure	Follow up time period	I ²	Study removed after sensitivity analysis	I ²
IA Corticosteroid vs Physiotherapy	Function	Late short-term	65%	-	-
		Mid-term	17%	-	-
	ER ROM	Early short-term	73%	-	-
		Late short-term	61%	Bulgen et al. (1984)	0%
		Mid-term	0%	-	-
IA Corticosteroid + Physiotherapy vs IA Corticosteroid	Pain	Early short-term	77%	Kraal et al. (2018)	0%
		Mid-term	1%	-	-
	Function	Early short-term	77%	Kraal et al. (2018)	0%
		Mid-term	0%	-	-
	ER ROM	Early short-term	87%	Maryam et al. (2012)	52%
		Mid-term	45%	-	-
IA Corticosteroid + Physiotherapy vs Physiotherapy	Pain	Early short-term	76%	Carette et al. (2003)	0%
		Mid-term	23%	-	-
	Function	Early short-term	7%	-	-

		Mid-term	2%	-	-
Comparison	Outcome Measure	Follow up time period	I ²	Study removed after sensitivity analysis	I ²
IA Corticosteroid + Physiotherapy vs Physiotherapy	ER ROM	Early short-term	53%	Carette et al. (2003)	0%
		Mid-term	92%	-	-
IA Corticosteroid vs SA Corticosteroid	Pain	Early short-term	95%	Cho et al. (2016)	60%
		Late short-term	52%	Cho et al. (2016)	22%
		Mid-term	78%	-	-
	Function	Early short-term	70%	Cho et al. (2016)	0%
		Late short-term	57%	Cho et al. (2016)	43%
	ER ROM	Early short-term	42%	-	-
		Late short-term	67%	Sun et al. (2018)	43%
Mid-term		28%	-	-	
Arthrographic Distension + IA Corticosteroid vs IA Corticosteroid	Pain	Early short-term	0%	-	-
		Late short-term	51%	Gam et al. (1998)	0%
	Function	Early short-term	61%	-	-
		Late short-term	0%	-	-

	ER ROM	Early short-term	18%	-	-
Comparison	Outcome Measure	Follow up time period	I ²	Study removed after sensitivity analysis	I ²
Arthrographic Distension + IA Corticosteroid vs IA Corticosteroid	ER ROM	Late short-term	85%	Reza et al. (2015)	0%
Acupuncture + Physiotherapy vs Physiotherapy	Pain	Early short-term	0%	-	-
	ER ROM	Early short-term	0%	-	-
ESWT + Physiotherapy vs Physiotherapy only (+/- sham ESWT)	Pain	Early short-term	93%*	-	-

Where the I² statistic was greater than 50% and there were at least four studies in the meta-analysis, sensitivity analyses were conducted to identify and remove a single study which was responsible for the high heterogeneity and the test was re-performed. *ER ROM, external rotation range of movement*

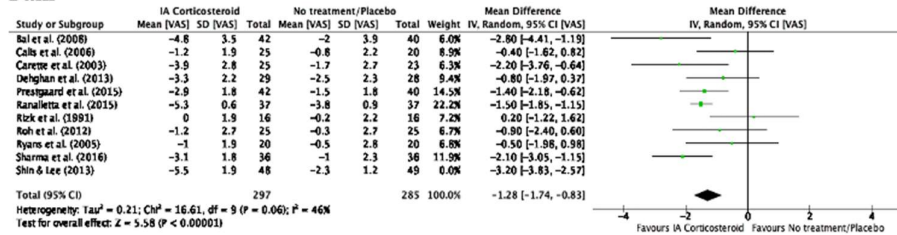
*Sensitivity analysis not performed as only three studies in meta-analysis

eFigure 1. Results of Pairwise Meta-analyses with Respective Mean Differences for Early Short-term Outcomes

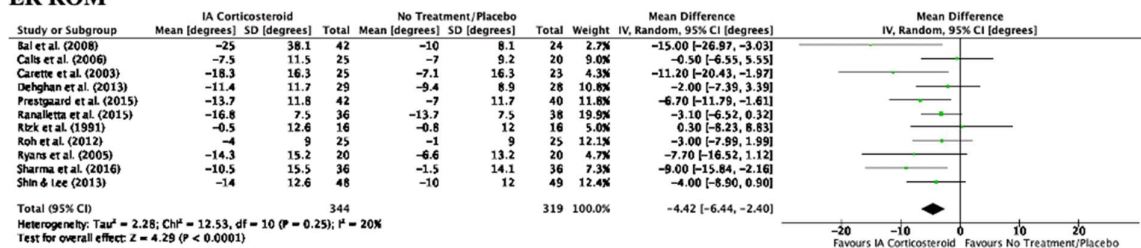
Early short-term results (2-6 weeks)

a) IA Corticosteroid vs No Treatment/Placebo

Pain

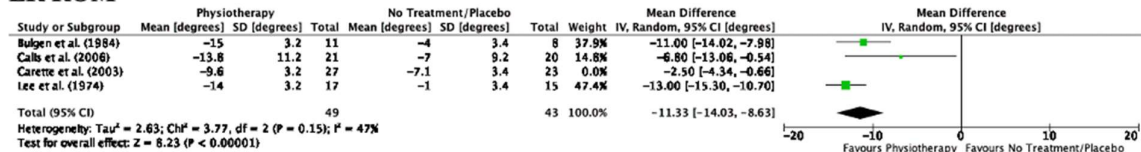


ER ROM



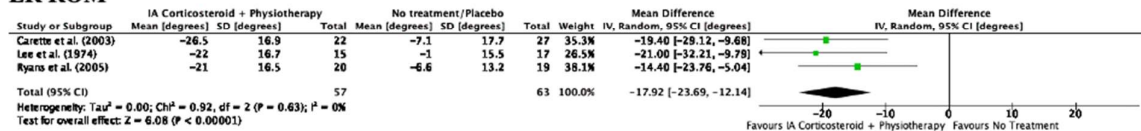
b) Physiotherapy vs No Treatment/Placebo

ER ROM



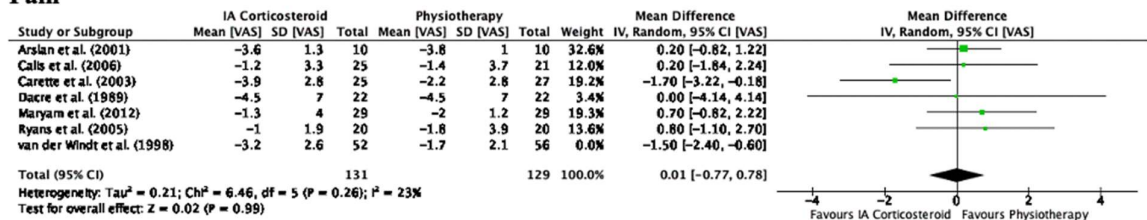
c) IA Corticosteroid + Physiotherapy vs No Treatment/Placebo

ER ROM

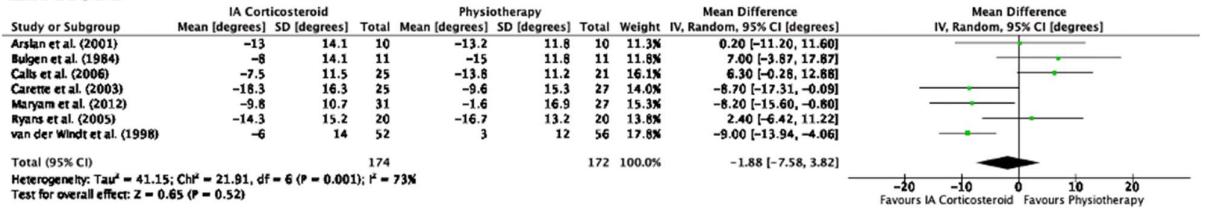


d) IA Corticosteroid vs Physiotherapy

Pain

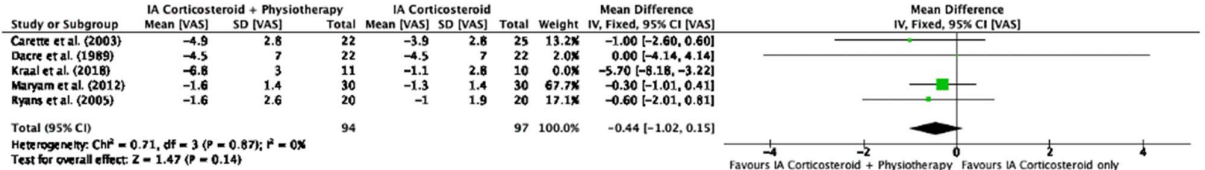


ER ROM

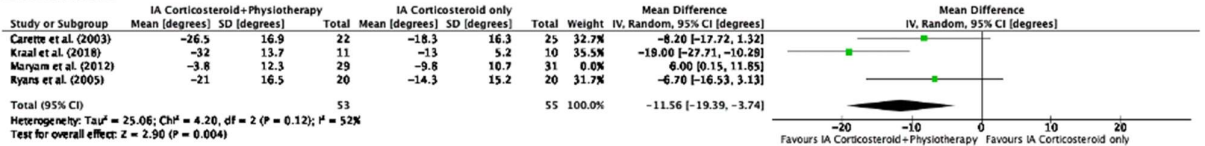


e) IA Corticosteroid + Physiotherapy vs IA Corticosteroid only

Pain

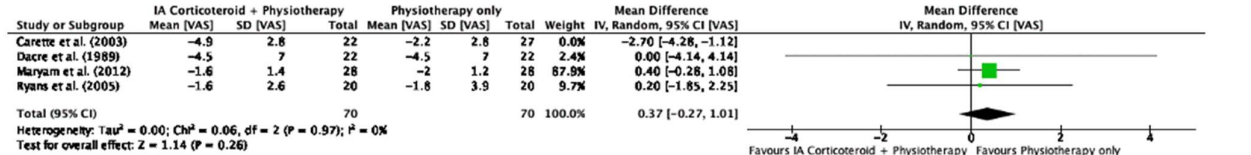


ER ROM

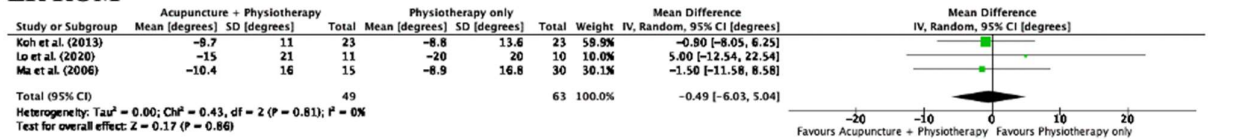


f) IA Corticosteroid + Physiotherapy vs Physiotherapy only

Pain

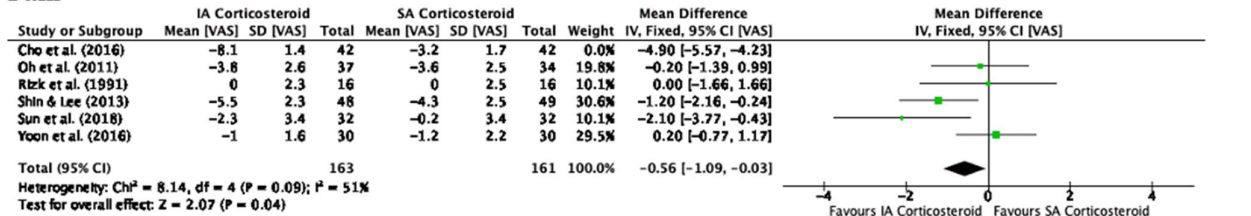


ER ROM

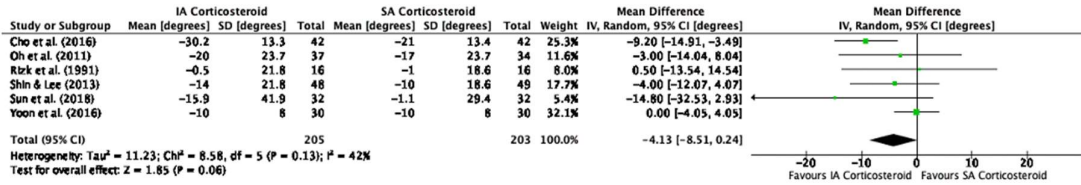


g) IA Corticosteroid vs SA Corticosteroid

Pain

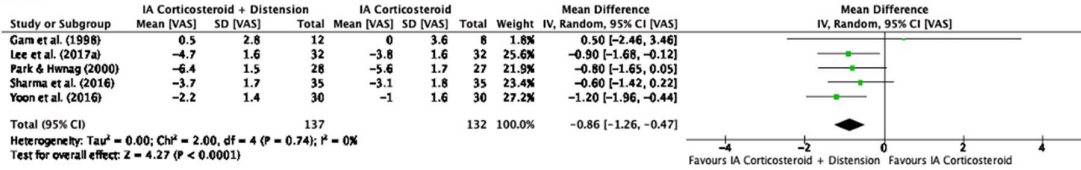


ER ROM

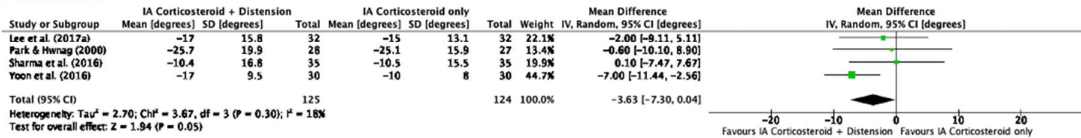


h) IA Corticosteroid + Arthrographic Distension vs IA Corticosteroid only

Pain

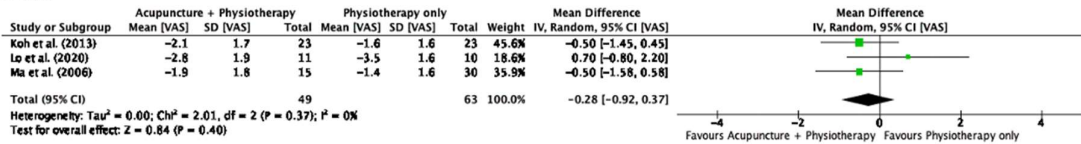


ER ROM

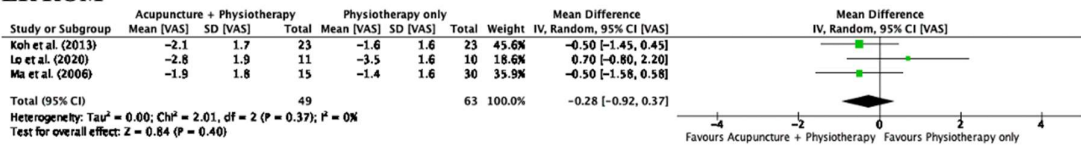


i) Acupuncture + Physiotherapy vs Physiotherapy only (+/- sham acupuncture)

Pain



ER ROM

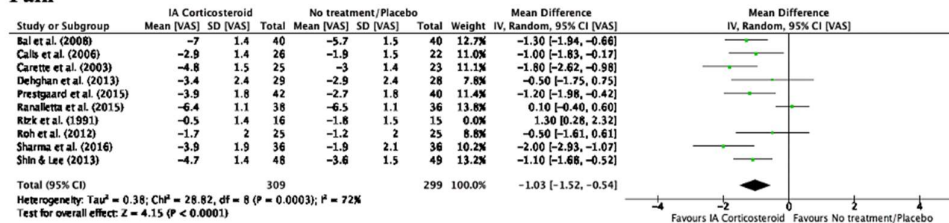


eFigure 2. Results of Pairwise Meta-analyses With Respective Mean Differences for Late Short-term Outcomes

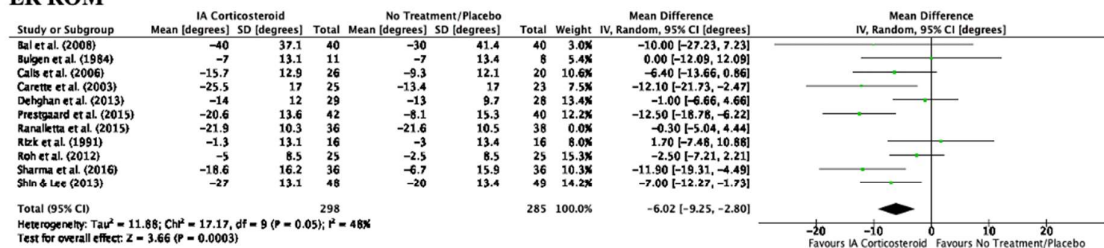
Late short-term results (8-12 weeks)

a) IA Corticosteroid vs No Treatment/Placebo

Pain

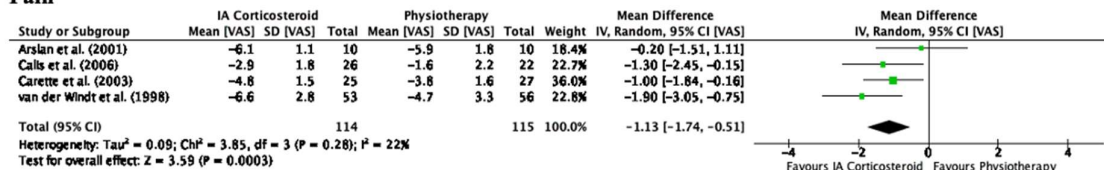


ER ROM

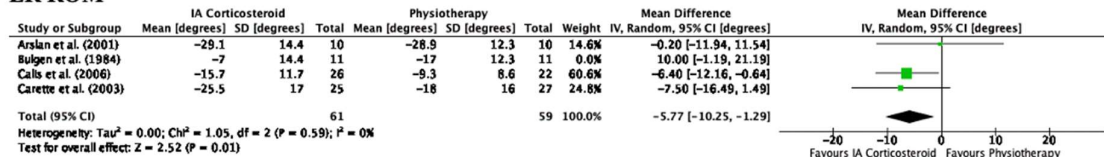


b) IA Corticosteroid vs Physiotherapy

Pain

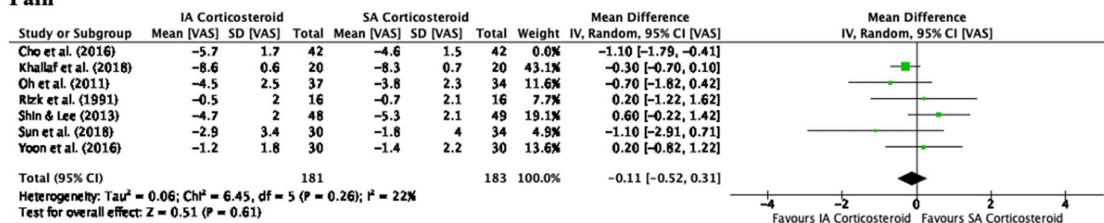


ER ROM



c) IA Corticosteroid vs SA Corticosteroid

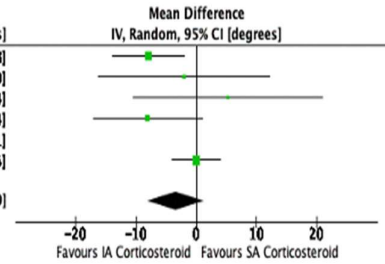
Pain



ER ROM

Study or Subgroup	IA Corticosteroid			SA Corticosteroid			Total	Weight	Mean Difference	
	Mean [degrees]	SD [degrees]	Total	Mean [degrees]	SD [degrees]	Total			IV, Random, 95% CI [degrees]	
Cho et al. (2016)	-30	13.7	42	-22.1	14	42	28.3%	-7.90	[-13.82, -1.98]	
Oh et al. (2011)	-20	30.5	37	-18	30.5	34	9.1%	-2.00	[-16.20, 12.20]	
Rizk et al. (1991)	-1.3	23.5	16	-6.6	21.9	16	7.7%	5.30	[-10.44, 21.04]	
Shin & Lee (2013)	-27	23.5	48	-19	21.9	49	17.8%	-8.00	[-17.04, 1.04]	
Sun et al. (2018)	-25.1	43	32	5	31.1	32	0.0%	-30.10	[-48.49, -11.71]	
Yoon et al. (2016)	-20	8	30	-20	8	30	37.1%	0.00	[-4.05, 4.05]	
Total (95% CI)			173			171	100.0%	-3.44	[-8.16, 1.29]	

Heterogeneity: $\tau^2 = 11.41$; $\chi^2 = 6.98$, $df = 4$ ($P = 0.14$); $I^2 = 43\%$
 Test for overall effect: $Z = 1.42$ ($P = 0.15$)

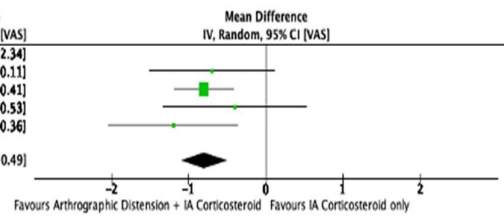


d) IA Corticosteroid + Arthrographic Distension vs IA Corticosteroid only

Pain

Study or Subgroup	Arthrographic Distension + IA Corticosteroid			IA Corticosteroid only			Total	Weight	Mean Difference	
	Mean [VAS]	SD [VAS]	Total	Mean [VAS]	SD [VAS]	Total			IV, Random, 95% CI [VAS]	
Gam et al. (1998)	-2	1.6	11	-3	1.6	11	0.0%	1.00	[-0.34, 2.34]	
Lee et al. (2017a)	-5	1.7	32	-4.3	1.6	32	14.1%	-0.70	[-1.51, 0.11]	
Reza et al. (2013)	-4.7	0.7	50	-3.9	1.2	50	62.1%	-0.80	[-1.19, -0.41]	
Sharma et al. (2016)	-4.3	2.3	35	-3.9	1.6	35	10.7%	-0.40	[-1.33, 0.53]	
Yoon et al. (2016)	-2.4	1.5	30	-1.2	1.8	30	13.1%	-1.20	[-2.04, -0.36]	
Total (95% CI)			147			147	100.0%	-0.80	[-1.10, -0.49]	

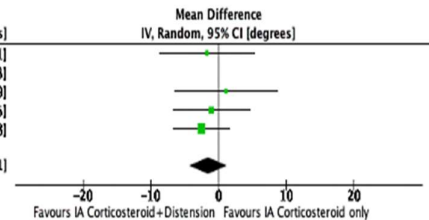
Heterogeneity: $\tau^2 = 0.00$; $\chi^2 = 1.65$, $df = 3$ ($P = 0.65$); $I^2 = 0\%$
 Test for overall effect: $Z = 5.14$ ($P < 0.00001$)



ER ROM

Study or Subgroup	IA Corticosteroid+Distension			IA Corticosteroid only			Total	Weight	Mean Difference	
	Mean [degrees]	SD [degrees]	Total	Mean [degrees]	SD [degrees]	Total			IV, Random, 95% CI [degrees]	
Lee et al. (2017a)	-18.3	16	32	-16.6	12.4	32	16.1%	-1.70	[-8.71, 5.31]	
Reza et al. (2013)	-30.4	15	50	-13.6	11.7	50	0.0%	-16.80	[-22.07, -11.53]	
Sharma et al. (2016)	-17.5	16.2	35	-18.6	16.2	35	13.7%	1.10	[-6.49, 8.69]	
Tvetza et al. (2008)	-11	14	39	-10	11	37	24.8%	-1.00	[-6.65, 4.65]	
Yoon et al. (2016)	-22.5	8.5	30	-20	8	30	45.4%	-2.50	[-6.68, 1.68]	
Total (95% CI)			136			134	100.0%	-1.50	[-4.32, 1.31]	

Heterogeneity: $\tau^2 = 0.00$; $\chi^2 = 0.70$, $df = 3$ ($P = 0.87$); $I^2 = 0\%$
 Test for overall effect: $Z = 1.05$ ($P = 0.29$)

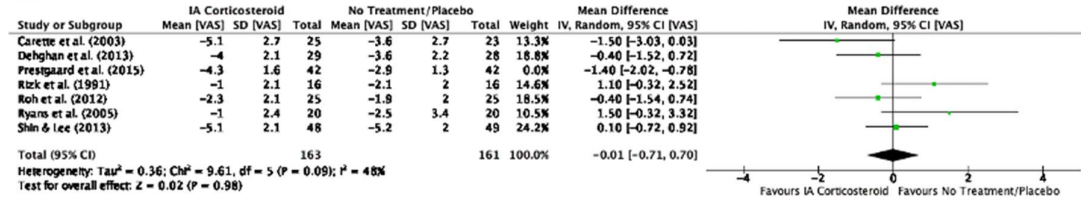


eFigure 3. Results of Pairwise Meta-analyses With Respective Mean Differences for Mid-term Outcomes

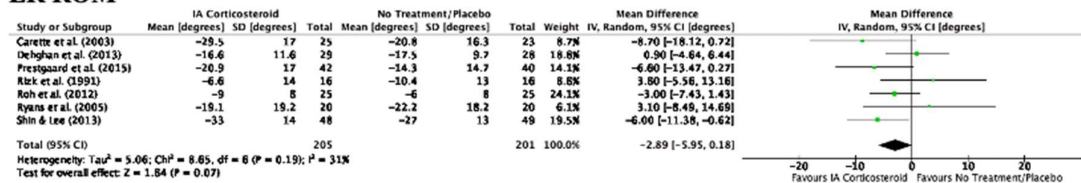
Mid-term results (4-6 months)

a) IA Corticosteroid vs No Treatment/Placebo

Pain

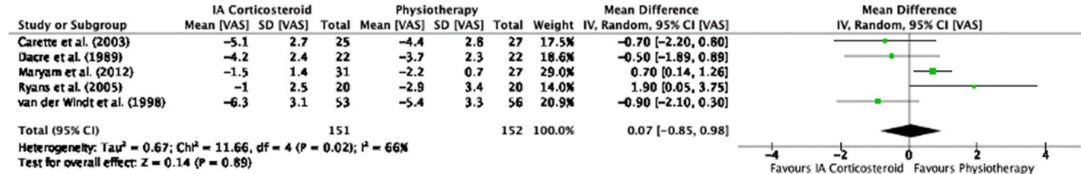


ER ROM

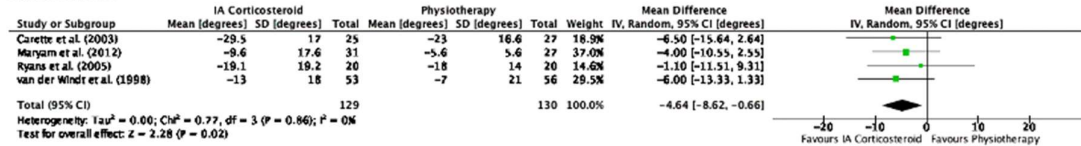


b) IA Corticosteroid vs Physiotherapy

Pain

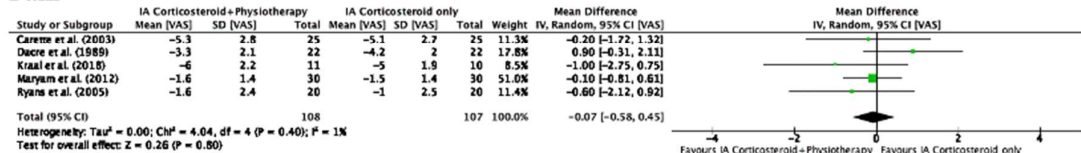


ER ROM

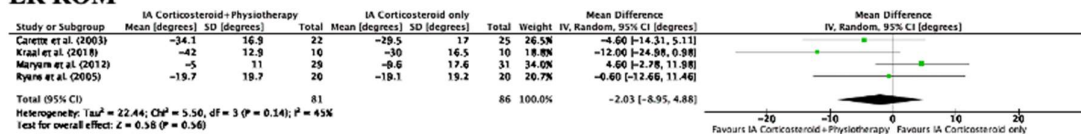


c) IA Corticosteroid + Physiotherapy vs IA Corticosteroid only

Pain

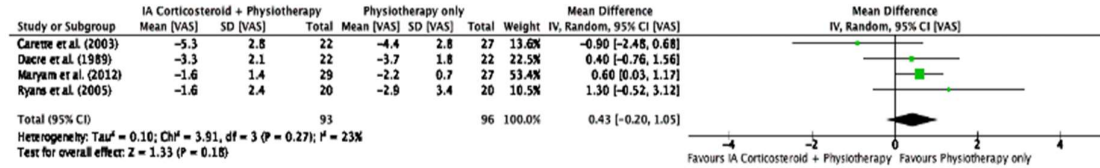


ER ROM

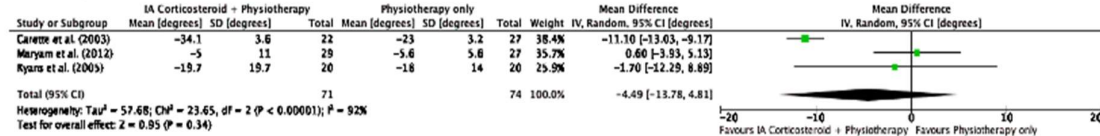


d) IA Corticosteroid + Physiotherapy vs Physiotherapy only

Pain

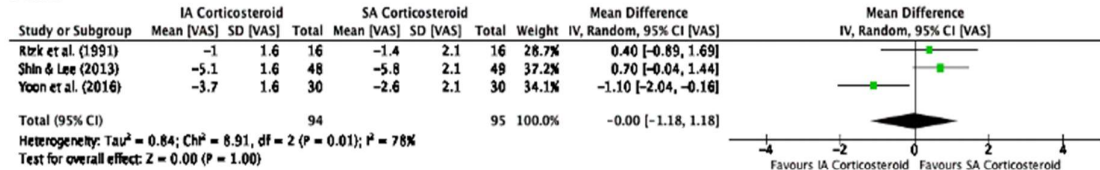


ER ROM



e) IA Corticosteroid vs SA Corticosteroid

Pain



ER ROM

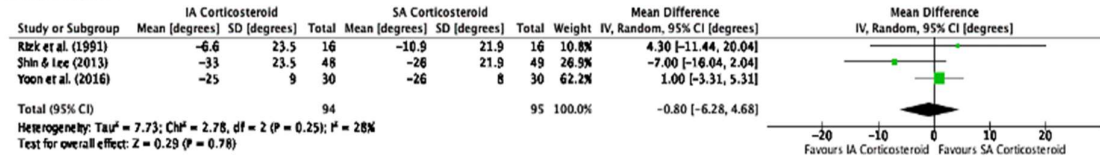
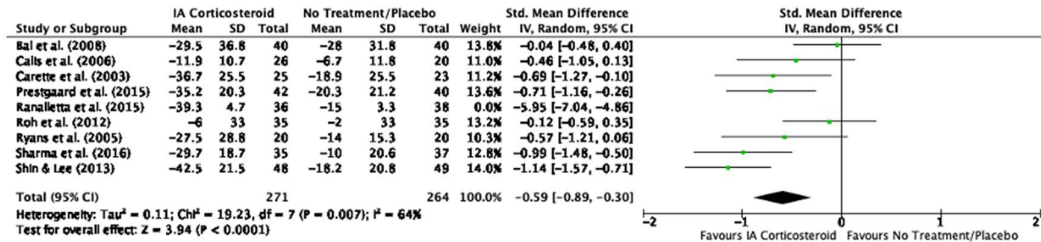
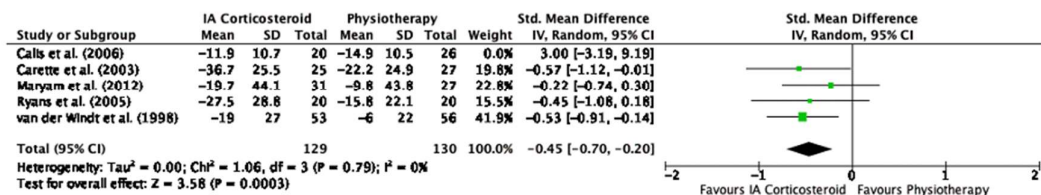


Figure 4. Results of Pairwise Meta-analyses With Respective Mean Differences for Function
Function Early short-term results (2-6 weeks)

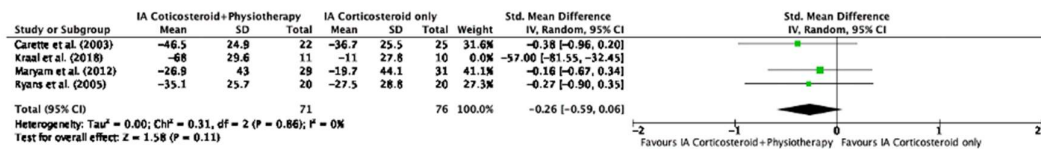
a) IA Corticosteroid vs No Treatment/Placebo



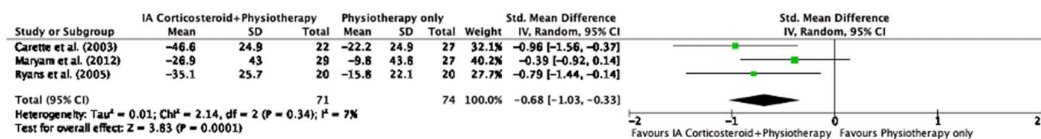
b) IA Corticosteroid vs Physiotherapy



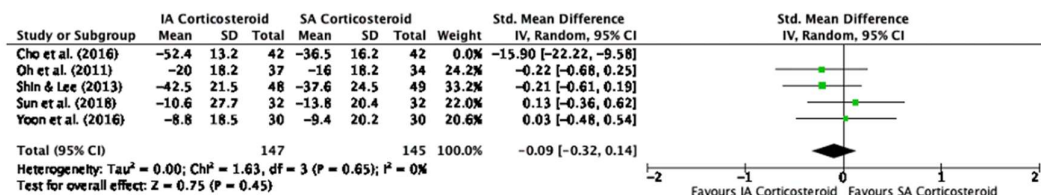
c) IA Corticosteroid + Physiotherapy vs IA Corticosteroid only



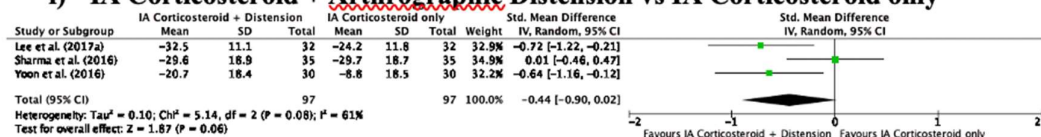
d) IA Corticosteroid + Physiotherapy vs Physiotherapy only



e) IA Corticosteroid vs SA Corticosteroid

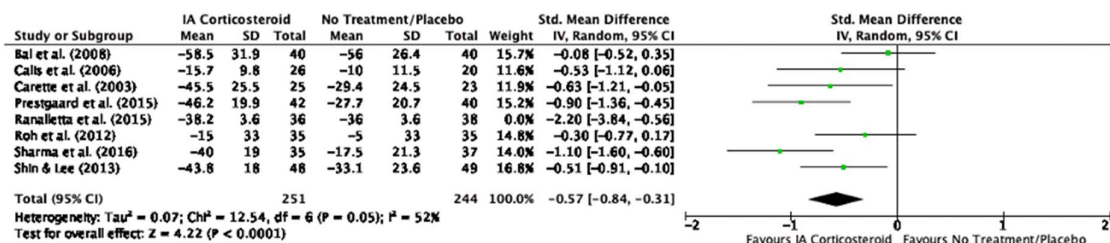


f) IA Corticosteroid + Arthrographic Distension vs IA Corticosteroid only

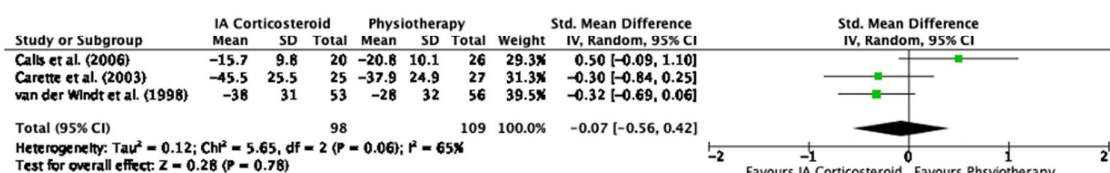


Function Late short-term results (8-12 weeks)

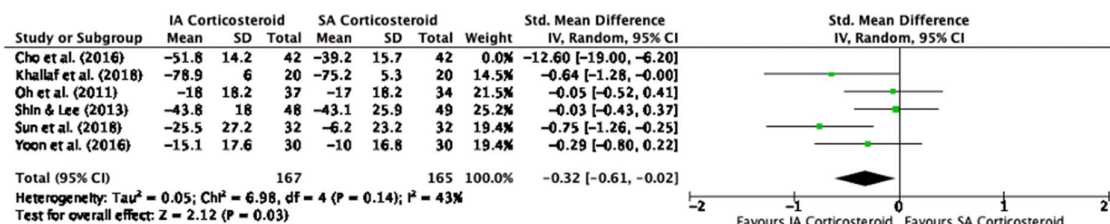
a) IA Corticosteroid vs No Treatment/Placebo



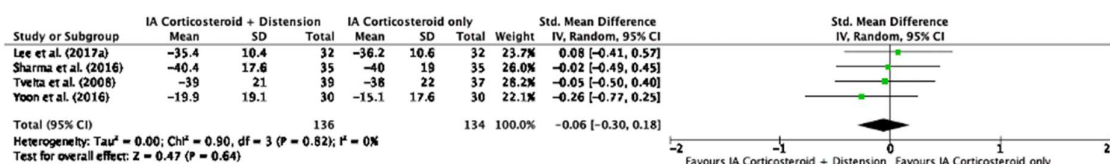
b) IA Corticosteroid vs Physiotherapy



c) IA Corticosteroid vs SA Corticosteroid

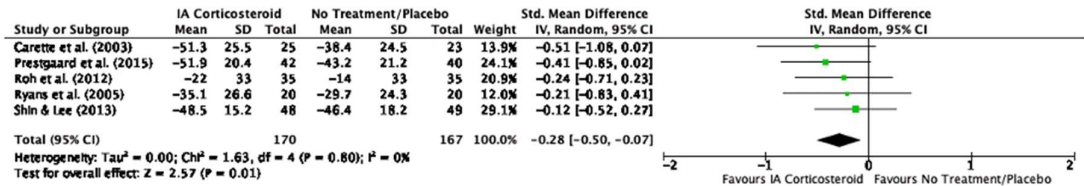


d) IA Corticosteroid + Arthrographic Distension vs IA Corticosteroid only

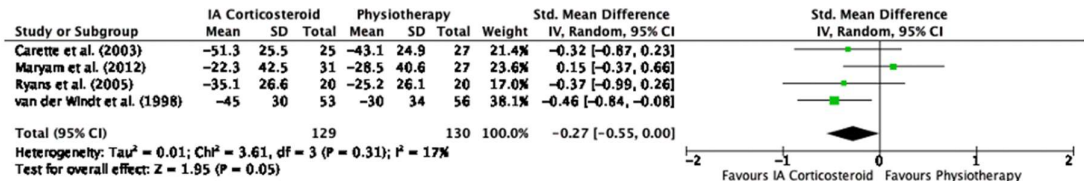


Function mid-term results (4-6 months)

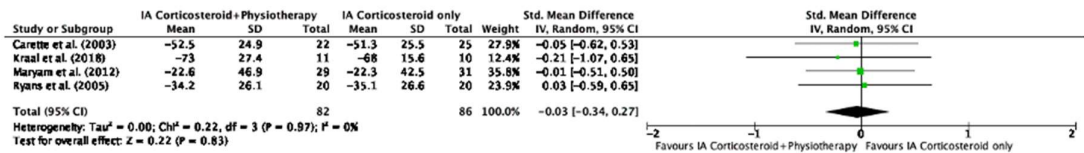
a) IA Corticosteroid vs No Treatment/Placebo



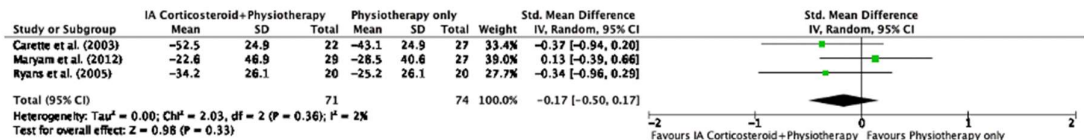
a) IA Corticosteroid vs Physiotherapy



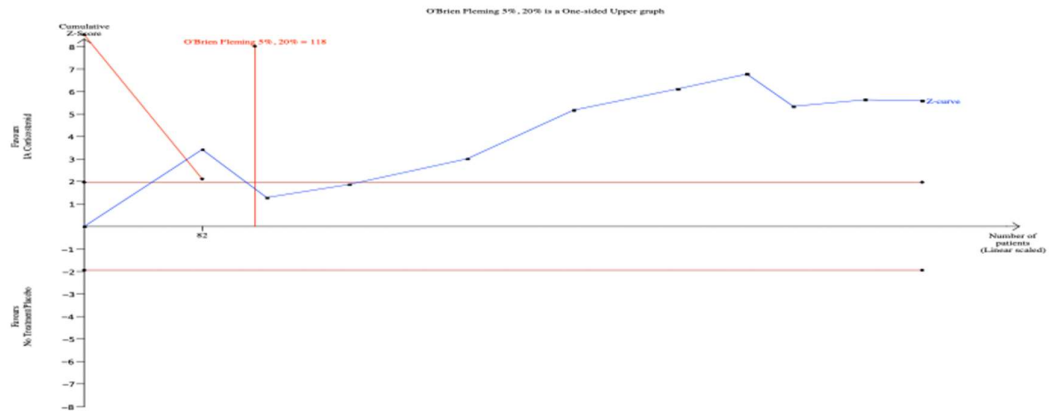
a) IA Corticosteroid + Physiotherapy vs IA Corticosteroid only



a) IA Corticosteroid + Physiotherapy vs Physiotherapy only



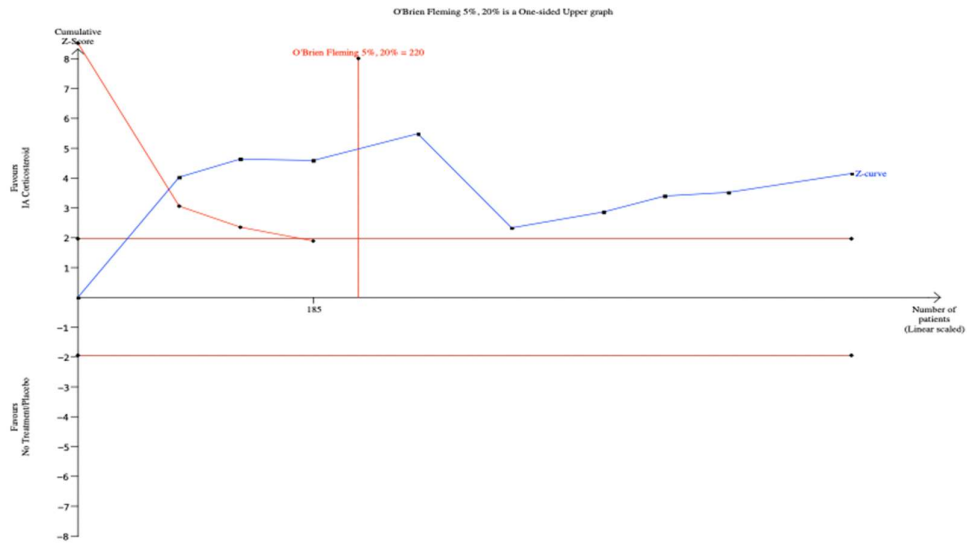
eFigure 5. TSA Results for IA Corticosteroid vs No Treatment or Placebo for Early Short-term Pain



Supplementary Figure 5 Trial sequential analysis results for intra-articular corticosteroid vs no treatment/placebo early short-term pain. The two horizontal red lines represent the conventional thresholds for statistical significance ($Z=1.96$, $P<0.05$), the vertical red the required information size, the diagonal red line the TSA boundaries (thresholds for statistical significance) and the blue the cumulative amount of information as trials are added. A significant result is denoted by an inter-crossing of the blue and diagonal red lines.

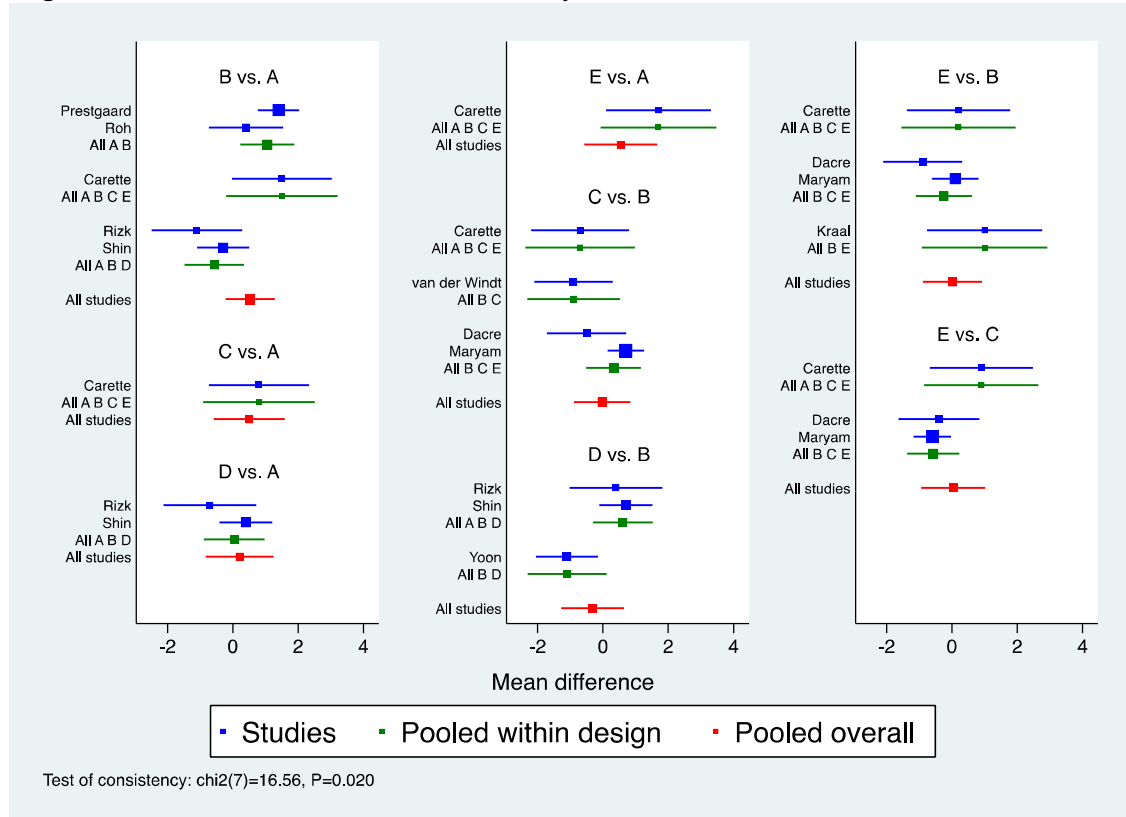
Supplementary Figure 6

eFigure 6. TSA Results for IA Corticosteroid vs No Treatment or Placebo for Late Short-term Pain



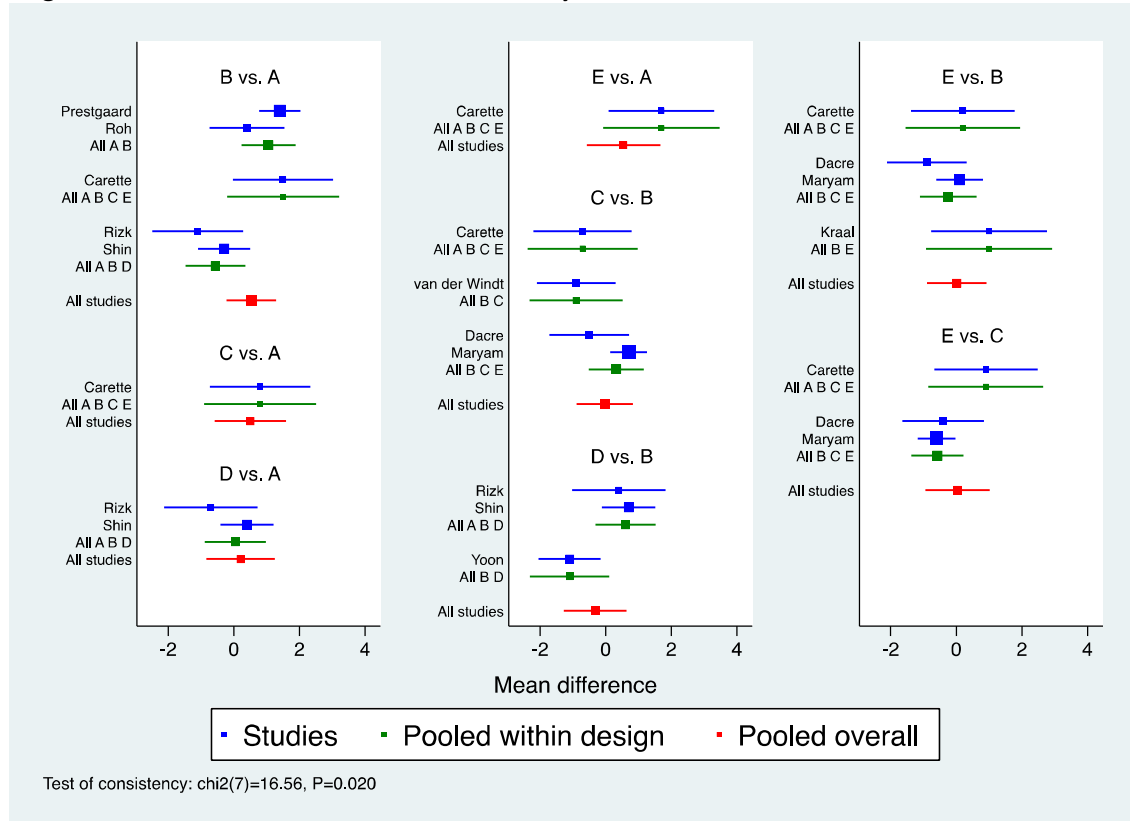
Supplementary Figure 6b. Trial sequential analysis results for intra-articular corticosteroid vs no treatment/placebo late short-term pain. The two horizontal red lines represent the conventional thresholds for statistical significance ($Z=1.96$, $P<0.05$), the vertical red line the required information size, the diagonal red line the TSA boundaries (thresholds for statistical significance) and the blue the cumulative amount of information as trials are added. A significant result is denoted by an inter-crossing of the blue and diagonal red lines.

Figure 7. Network Forest Plots With Consistency Test for Late Short-term Pain



A, no treatment/placebo; B, intra-articular corticosteroid; C, physiotherapy; D, subacromial corticosteroid; E, arthrographic distension plus intra-articular corticosteroid; F, oral corticosteroid

eFigure 8. Network Forest Plots With Consistency Test for Mid-term Pain



A, no treatment/placebo; B, intra-articular corticosteroid; C, physiotherapy; D, subacromial corticosteroid; E, intra-articular corticosteroid plus physiotherapy.