

## SUPPLEMENTARY MATERIAL A

### Comprehensive Search Strategy

Embase.com	1162	1155
Medline (OvidSP)	786	190
Web-of-science	819	300
Scopus	1236	223
Cinahl	450	132
Cochrane	24	3
PubMed publisher	19	8
Google Scholar	200	43
Sportdiscus	573	197
<b>Total</b>	<b>5269</b>	<b>2251</b>

#### Embase.com

('hip pain'/de OR 'inguinal pain'/de OR (('inguinal region'/de OR hip/de) AND (pain/de OR 'chronic pain'/de)) OR (((hip OR groin OR inguinal) NEAR/6 (pain\*)) OR pubalgia):ab,ti) AND (sport/exp OR 'team sport'/de OR 'sport injury'/de OR 'sports medicine'/de OR athlete/de OR 'athletic performance'/de OR 'marathon runner'/de OR (sport\* OR football\* OR soccer\* OR hockey OR rugby OR running OR runner\* OR marathon OR basketball OR gymnast\* OR athlet\* OR cycling OR cyclist\* OR endurance OR triathl\*):ab,ti)

#### Medline (OvidSP)

((groin/ OR hip/) AND (pain/ OR "Acute Pain"/ OR "chronic pain"/)) OR (((hip OR groin OR inguinal) ADJ6 (pain\*)) OR pubalgia).ab,ti.) AND (exp sports/ OR "Athletic Injuries"/ OR "sports medicine"/ OR athletes/ OR "athletic performance"/ OR (sport\* OR football\* OR soccer\* OR hockey OR rugby OR running OR runner\* OR marathon OR basketball OR gymnast\* OR athlet\* OR cycling OR cyclist\* OR endurance OR triathl\*):ab,ti.)

#### Cochrane

((((hip OR groin OR inguinal) NEAR/6 (pain\*)) OR pubalgia):ab,ti) AND ((sport\* OR football\* OR soccer\* OR hockey OR rugby OR running OR runner\* OR marathon OR basketball OR gymnast\* OR athlet\* OR cycling OR cyclist\* OR endurance OR triathl\*):ab,ti)

#### Web-of-science

TS=(((hip OR groin OR inguinal) NEAR/6 (pain\*)) OR pubalgia) AND ((sport\* OR football\* OR soccer\* OR hockey OR rugby OR running OR runner\* OR marathon OR basketball OR gymnast\* OR athlet\* OR cycling OR cyclist\* OR endurance OR triathl\*))

#### Scopus

TITLE-ABS-KEY((((hip OR groin OR inguinal) W/6 (pain\*)) OR pubalgia) AND ((sport\* OR football\* OR soccer\* OR hockey OR rugby OR running OR runner\* OR marathon OR basketball OR gymnast\* OR athlet\* OR cycling OR cyclist\* OR endurance OR triathl\*)))

#### Cinahl

((MH groin+ OR MH hip+) AND (MH pain OR MH "chronic pain")) OR (((hip OR groin OR inguinal) N6 (pain\*)) OR pubalgia) AND (MH sports+ OR MH "Athletic Injuries+" OR MH "sports medicine+" OR

MH athletes+ OR MH "athletic performance+" OR (sport\* OR football\* OR soccer\* OR hockey OR rugby OR running OR runner\* OR marathon OR basketball OR gymnast\* OR athlet\* OR cycling OR cyclist\* OR endurance OR triathl\*))

### **sportdicus**

((MH groin+ OR MH hip joint+) AND (MH pain OR MH "chronic pain")) OR (((hip OR groin OR inguinal) N6 (pain\*)) OR pubalgia)) AND (MH sports+ OR MH "Sports Injuries+" OR MH "sports medicine+" OR MH athletes+ OR MH "athletics+" OR (sport\* OR football\* OR soccer\* OR hockey OR rugby OR running OR runner\* OR marathon OR basketball OR gymnast\* OR athlet\* OR cycling OR cyclist\* OR endurance OR triathl\*))

### **PubMed publisher**

(hip pain\*[tiab] OR groin pain\*[tiab] OR inguinal pain\*[tiab] OR pubalgia\*[tiab]) AND ((sport\*[tiab] OR football\*[tiab] OR soccer\*[tiab] OR hockey[tiab] OR rugby[tiab] OR running[tiab] OR runner\*[tiab] OR marathon[tiab] OR basketball OR gymnast\*[tiab] OR athlet\*[tiab] OR cycling[tiab] OR cyclist\*[tiab] OR endurance[tiab] OR triathl\*[tiab])) AND publisher(1)

### **Google Scholar**

"hip|groin|inguinal pain"|pubalgia

sport|sports|football|soccer|hockey|rugby|running|runner|runners|basketball|gymnastics|gymnasts|athlete|athletes|athletic|cycling|cyclist|endurance|triathlon|triathlete

SUPPLEMENTARY MATERIAL B

**Quality Assessment Tool: Modified Downs and Black.**

<b>Patients/selection bias</b>	<b>YES (published)</b>	<b>Unable to Determine</b>	<b>NO</b>	<b>YES (author reply)</b>
1) Is the hypothesis/aim/objective of the study clearly described?				
2) Are the characteristics of the patients included in the study clearly described?				
3) Is the patient sample representative of patients treated in routine clinical practice?				
4) Is there information on possibility of selection bias present in study?				
<b>Comparison</b>				
5) Was a comparison group identified and clearly defined?				
<b>Outcomes</b>				
6) Are the main outcomes to be measured clearly described in the Introduction or Methods section?				
7) Were the main outcome measures used accurate (valid and reliable)?		Accuracy not reported but method clearly described		
8) Was an attempt made to blind those measuring the main outcomes of the intervention?				
<b>Reported findings/statistical analysis</b>				
9) Are the main findings of the study clearly described?				
10) Does the study provide estimates of the random variability in the data for the main outcomes?				
11) Were the statistical tests used to assess the main outcomes appropriate?				
<b>Confounding</b>				
12) Are the distributions of principal confounders in each group of subjects to be compared clearly described? <i>(e.g. age, sex, height, weight, activity level, sporting activity, player position, dominance, duration symptoms)</i>	2	Partially (1)	0	
13) Was there adequate adjustment for confounding in the analyses from which the main findings were drawn?				
<b>Power</b>				
14) Was a sample size calculation reported?				
15) Did the study have sufficient power to detect a clinically important effect where the probability value for a difference being due to chance is less than 5%?				

Supplementary Table 1 Methodological Quality of the included studies

Item number	modified Downs and Black scale															Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Jansen et al 2010	1	1	1	1	1	1	1	0	1	1	1	2	1	1	1	15
Nevin and Delahunt 2013	1	1	1	1	1	1	1	0	1	1	1	2	1	1	1	15
Cowan et al 2004	1	1	1	1	1	1	1	1	1	1	1	2	1	0	1	15
Mens et al 2006	1	1	1	1	1	1	1	1	1	1	1	2	0	0	1	14
Malliaras et al 2009	1	1	1	0	1	1	1	0	1	1	1	2	1	1	0	13
Sayed Mohammad et al 2014	1	1	1	1	1	1	0	0	1	1	1	2	1	0	1	13
Mohammad et al 2014	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	13
Bedi et al 2013	1	1	1	1	1	1	1	0	1	1	1	1	0	0	1	12
Taylor et al 2011	1	1	1	1	1	1	0	0	1	1	1	1	1	0	1	12
Verrall et al 2005b	1	0	1	1	1	1	1	1	1	1	1	1	0	0	1	12
Verrall et al 2005a	1	0	1	1	1	1	0	1	1	1	1	1	0	0	1	11
Paajanen et al 2008	1	1	1	0	1	1	0	1	1	1	1	1	0	0	1	11
Verrall et al 2001	1	0	1	1	0	1	0	1	1	1	1	1	0	0	1	10
Siebenrock et al 2013	1	0	1	1	1	1	0	0	1	1	1	1	0	0	1	10
Cunningham et al 2007	1	0	1	0	1	1	0	1	1	1	1	1	0	0	1	10
Brennan et al 2005	1	0	1	0	1	1	0	0	1	1	1	1	1	0	1	10
Besjakov et al 2003	1	0	1	1	1	1	1	0	1	1	0	0	0	0	0	8