S1. Search strategies (replicated from Van der Heijden et al.[1]

**Cochrane Central Register of Controlled Trials (Wiley Online Library)**

#1 MeSH descriptor: [Patellofemoral Pain Syndrome] this term only

#2 MeSH descriptor: [Patella] this term only

#3 MeSH descriptor: [Knee Joint] explode all trees

#4 MeSH descriptor: [Knee] this term only

#5 #2 or #3 or #4

#6 MeSH descriptor: [Arthralgia] this term only

#7 MeSH descriptor: [Pain] explode all trees

#8 #6 or #7

#9 #5 and #8

#10 anterior knee pain:ti,ab,kw

#11 (patell\* or femoropatell\* or femoro-patell\* or retropatell\*) near/2 (pain or syndrome or dysfunction):ti,ab,kw

#12 ((lateral compression or lateral facet or lateral pressure or odd facet) near/2 syndrome):ti,ab,kw

#13 (chondromalac\* or chondropath\* or chondrosis) near/2 (knee\* or patell\* or femoropatell\* or femoro-patell\* or retropatell\*):ti,ab,kw

#14 MeSH descriptor: [Chondromalacia Patellae] this term only

#15 #1 or #9 or #10 or #11 or #12 or #13 or #14

#16 MeSH descriptor: [Exercise Therapy] explode all trees

#17 MeSH descriptor: [Exercise] explode all trees

#18 exercis\* or strengthen\* or stretch\* or train\* or physiotherapy or physical therap\*:ti,ab,kw

#19 #16 or #17 or #18

#20 #9 and #15 and #19 in Trials

**MEDLINE (Ovid Online)**

1 Patellofemoral Pain Syndrome/

2 Patella/ or exp Knee Joint/ or Knee/

3 Arthralgia/ or Pain/

4 2 and 3

5 anterior knee pain.tw.

6 ((patell\* or femoropatell\* or femoro-patell\* or retropatell\*) adj2 (pain or syndrome or dysfunction)).tw.)

7 ((lateral compression or lateral facet or lateral pressure or odd facet) adj2 syndrome).tw. (20)

8 ((chondromalac\* or chondropath\* or chondrosis) adj2 (knee\*1 or patell\* or femoropatell\* or femoro-patell\* or retropatell\*)).tw. (513) 9 Chondromalacia Patellae/

10 or/1,4-9

11 exp Exercise Therapy/ or exp Exercise/

12 (exercis\* or strengthen\* or stretch\* or train\* or physiotherapy or physical therap\*).tw.

13 or/11-12

14 Randomized controlled trial.pt.

15 Controlled clinical trial.pt.

16 randomized.ab.

17 placebo.ab.

18 Drug therapy.fs

19 randomly.ab.

20 trial.ab.

21 groups.ab

22 or/14-21

23 exp Animals/ not Humans/ (

24 22 not 23

25 and/10,13,24

**EMBASE (Ovid Online)**

1 Patellofemoral Pain Syndrome/

2 Patella/ or Patellofamoral Joint/

3 Arthralgia/ or Pain/

4 2 and 3

5 Knee Pain/

6 anterior knee pain.tw.

7 ((patell\* or femoropatell\* or femoro-patell\* or retropatell\*) adj2 (pain or syndrome or dysfunction)).tw.

8 ((lateral compression or lateral facet or lateral pressure or odd facet) adj2 syndrome).tw. 9 ((chondromalac\* or chondropath\* or chondrosis) adj2 (knee\*1 or patell\* or femoropatell\* or femoro-patell\* or retropatell\*)).tw. (601) 10 Patella Chondromalacia/

11 or/1,4-10

12 exp Exercise/ or exp Kinesiotherapy/

13 (exercis\* or strengthen\* or stretch\* or train\* or physiotherapy or physical therap\*).tw. 14 12 or 13

15 exp Randomized Controlled Trial/ or exp Single Blind Procedure/ or exp Double Blind Procedure/ or Crossover Procedure/

16 (random\* or RCT or placebo or allocat\* or crossover\* or ’cross over’ or trial or (doubl\* adj1 blind\*) or (singl\* adj1 blind\*)).ti,ab.

17 15 or 16

18 (exp Animal/ or Animal.hw. or Nonhuman/) not (exp Human/ or Human Cell/ or (human or humans).ti.)

19 17 not 18

20 11 and 14 and 19

**CINAHL (EBSCO)**

S1 (MH “Patellofemoral Pain Syndrome”)

S2 (MH “Patella”) OR (MH “Knee”) OR (MH “Knee Joint”)

S3 (MH “Arthralgia”) and (MH “Pain”)

S4 S2 AND S3

S5 TX anterior knee pain

S6 TX ((patell\* or femoropatell\* or femoro-patell\* or retropatell\*) n2 (pain or syndrome or dysfunction))

S7 TX ((lateral compression or lateral facet or lateral pressure or odd facet) n2 syndrome)

S8 TX ((chondromalac\* or chondropath\* or chondrosis) n2 (knee\* or patell\* or femoropatell\* or femoro-patell\* or retropatell\*)) (107) S9 (MH “Chondromalacia Patella”) S10 S1 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9

S11 (MH “Therapeutic Exercise+”) and (MH “Exercise+”)

S12 (exercis\* or strengthen\* or stretch\* or train\* or physiotherapy or physical therap\*)

S13 S11 OR S12

S14 PT clinical trial

S15 (MH “Clinical Trials+”)

S16 TI clinical trial\* OR AB clinical trial\*

S17 TI ( (single blind\* or double blind\*) ) OR AB ( (single blind\* or double blind\*) )

S18 TI random\* OR AB random\*

S19 S14 OR S15 OR S16 OR S17 OR S18

S20 S10 AND S13 AND S19

**AMED (Ovid Online)**

1 Patellofemoral pain syndrome/

2 Patella/ or Knee/ or Knee Joint/

3 Pain/ or Arthralgia/

4 2 and 3

5 anterior knee pain.tw.

6 ((patell\* or femoropatell\* or femoro-patell\* or retropatell\*) adj2 (pain or syndrome or dysfunction)).tw.

7 ((lateral compression or lateral facet or lateral pressure or odd facet) adj2 syndrome).tw.

8 ((chondromalac\* or chondropath\* or chondrosis) adj2 (knee\*1 or patell\* or femoropatell\* or femoro-patell\* or retropatell\*)).tw. (29) 9 or/1,4-8

10 Randomized controlled trial.pt.

11 Controlled clinical trial.pt.

12 Randomized Controlled Trials/

13 Random Allocation/

14 Double-Blind Method/

15 or/10-14

16 exp Animals/ not Humans/

17 15 not 16

18 Clinical trial.pt.

19 exp Clinical trials/

20 (clinic\* adj25 trial\*).tw.

21 ((singl\* or doubl\* or trebl\* or tripl\*) adj (mask\* or blind\*)).tw.

22 Placebos/

23 placebo\*.tw.

24 random\*.tw.

25 exp Research design/

26 (latin adj square).tw.

27 or/18-26

28 27 not 16

29 28 not 17

30 9 and 29

**References:**

1. van der Heijden RA, Lankhorst NE, van Linschoten R, Bierma-Zeinstra SM, van Middelkoop M. Exercise for treating patellofemoral pain syndrome. The Cochrane database of systematic reviews 2015;**1**:Cd010387 doi: 10.1002/14651858.CD010387.pub2[published Online First: Epub Date]|.