

Supplementary Table 1. Characteristics of included studies

No	First author, year of publication (reference)	Intervention-category	Affected joint	Number of patients that completed the study	Do they mention using core outcome set?	Follow-up time
1.	Abbot JH, 2013 (1)	Physical	Hip and knee	38	no	20 weeks
2.	Abbot JH, 2015 (2)	Physical	Knee	93	no	24 weeks
3.	Abolhassanzadeh Z, 2015 (3)	Alternative	Knee	not reported	yes	12 months
4.	Abou-Raya A, 2014 (4)	Pharmacologic	Knee	124	no	2 years
5.	Abou-Raya S, 2012 (5)	Pharmacologic	knee	274	no	16 weeks
6.	Al Rashoud AS, 2014 (6)	Combined	Knee	613	no	36 months

7.	Alayat MS, 2017 (7)	Combined	Knee	not precised	no	3 months
8.	Alfredo PP, 2012 (8)	Physical	Knee	308	no	3 months
9.	Alghadir A, 2014 (9)	Physical	Knee	40	no	6 weeks
10.	Ali SS, 2014 (10)	Physical	Knee	38	no	16 weeks
11.	Alkatan M, 2016 (11)	Physical	Various joints	not precised	no	6 months
12.	Allen KD, 2016 (12)	Behavioral	Hip and Knee	147	no	2 years
13.	Allen KD, 2016 (13)	Physical	Knee	52	no	6 weeks

14.	Allen KD, 2017 (14)	Behavioral	Hip or Knee	49	no	6 months
15.	Alpayci M, 2013 (15)	Physical	Knee	71	no	29 months
16.	Altman R, 2015 (16)	Pharmacologic	Knee	17	no	3 months
17.	Anandkumar S, 2014 (17)	Physical	Knee	164	no	180 days
18.	Arazpour M, 2013 (18)	Assistive devices	Knee	55	no	20 weeks
19.	Arden NK, 2014 (19)	Alternative	Knee	30	no	6 weeks
20.	Arendt-Nielsen L, 2016 (20)	Pharmacologic	Knee	40	no	immediate follow-up

21.	Arjmandi BH, 2014 (21)	Alternative	Knee	71	no	12 weeks
22.	Armagan O, 2012 (22)	Combined	Knee	163	no	12 months
23.	Armagan O, 2015 (23)	Combined	Knee	184	yes	5 weeks
24.	Ashraf A, 2014 (24)	Combined	Knee	65	no	24 weeks
25.	Bagnato GL, 2012 (25)	Physical	Knee	132	no	4 weeks
26.	Bagnato GL, 2016 (26)	Physical	Knee	153	yes	12 weeks
27.	Balanescu AR, 2014 (27)	Pharmacologic	Hip or Knee	171	no	12 weeks

28.	Bani MA, 2013 (28)	Assistive devices	thumb carpomet acarpal	98	no	4 weeks
29.	Bar-Or D, 2014 (29)	Alternative	Knee	69	no	10 weeks
30.	Battaglia M, 2013 (30)	Alternative	Hip	110	no	42 days
31.	Beer C, 2013 (31)	Alternative	Knee	174	yes	24 weeks
32.	Bennell KL, 2014 (32)	Physical	Knee	82	no	13 weeks
33.	Bennell KL, 2014 (33)	Physical	Knee	74	no	36 weeks
34.	Bennell KL, 2014 (34)	Physical	Hip	96 (group 1) 83 (group 2)	yes	Group 1 (13 weeks) Group 2 (36 weeks)

35.	Berenbaum F, 2012 (35)	Pharmacologic	Knee	30	no	26 weeks
36.	Beselga C, 2016 (36)	Physical	Hip	not precised	no	not precised
37.	Bisicchia S, 2016 (37)	Alternative	Knee	35	no	10 weeks
38.	Bodick N, 2015 (38)	Pharmacologic	Knee	50	no	3 months
39.	Bossen D, 2013 (39)	Behavioral	Hip and Knee	399	no	18 months
40.	Boyaci A, 2013 (40)	Physical	Knee	60	no	12 weeks
41.	Boyer KA, 2012 (41)	Pharmacologic	Knee	47	no	12 weeks

42.	Branco M, 2016 (42)	Alternative	Knee	182	no	12 months
43.	Broderick JE, 2014 (43)	Psychologic	Hip and Knee	45	no	6 months
44.	Brosseau L, 2012 (44)	Physical	Knee	32	no	12 weeks
45.	Brown MT, 2012 (45)	Physical	Knee	61	no	12 weeks
46.	Brown MT, 2013 (46)	Pharmacologic	Hip	31	no	48 weeks
47.	Bruce-Brand RA, 2012 (47)	Physical	Knee	60	no	12 months
48.	Bryk FF, 2016 (20, 48)	Physical	Knee	34	no	1 year

49.	Cakir S, 2014 (49)	Physical	Knee	116	no	12 weeks
50.	Callaghan MJ, 2015 (50)	Assistive devices	Knee	89	no	26 weeks
51.	Campos GC, 2015 (51)	Assistive devices	Knee	72	yes	3 months
52.	Cerza F, 2012 (52)	Alternative	Knee	50	no	6 months
53.	Chen JS, 2015 (53)	Alternative	Knee	427	no	6 months
54.	Chen LX, 2013 (54)	Physical	Knee	89	no	4 weeks
55.	Chen R, 2015 (55)	Alternative	Knee	11	no	6 months

56.	Chen TW, 2014 (56)	Physical	Knee	256	no	7 days
57.	Chen WL, 2013 (57)	Combined	Knee	46	no	12 months
58.	Chen X, 2015 (58)	Physical	Knee	1256	no	12 weeks
59.	Cherian JJ, 2015 (59)	Assistive devices	Knee	160	no	6 months
60.	Cherian JJ, 2015 (60)	Physical	Knee	82	no	8 weeks
61.	Cherian JJ, 2016 (61)	Physical	Knee	159	yes	68 weeks
62.	Cherian JJ, 2016 (62)	Physical	Knee	63	no	52 weeks

63.	Cheung C, 2014 (63)	Physical	Knee	54	yes	2 weeks
64.	Chevalier X, 2015 (64)	Pharmacologic	Hand	30	no	14 weeks
65.	Chiranthanut N, 2014 (65)	Combined	Knee	not reported	no	18 months
66.	Cho HY, 2015 (66)	Physical	Knee	33	yes	12 weeks
67.	Chopra A, 2013 (67)	Combined	Knee	423	no	26 weeks
68.	Christensen R, 2015 (68)	Behavioral	Knee	74	no	3 months
69.	Cömert Kılıç S, 2015 (69)	Alternative	Temporo mandibular joint	39	no	8 weeks

70.	Conaghan PG, 2013 (70)	Pharmacologic	Knee	472	no	12 weeks
71.	Connelly AE, 2014 (71)	Alternative	knee	57	no	90 days
72.	Cortés Godoy V, 2014 (72)	Physical	Knee	76	no	12 months
73.	Coulson S, 2013 (73)	Alternative	Knee	56	no	60 day
74.	Crossley KM, (74)	Physical	Knee	not precised	no	24 weeks
75.	Cuperus N, 2015 (75)	Combined	Generalized	97	no	12 weeks
76.	Cuperus N, 2016 (76)	Behavioral	Generalized OA	40	no	6 months

77.	da Silva FS, 2015 (77)	Combined	Knee	78	no	5 weeks
78.	Dahlberg LE, 2016 (78)	Alternative	Knee	343	yes	26 weeks
79.	Dallari D, 2016 (79)	Alternative	Hip	58	no	24 weeks
80.	Dávila-Parrilla A, 2015 (80)	Pharmacologic	Knee	136	no	1 year
81.	de Campos GC, 2013 (81)	Combined	Knee	109	yes	18 weeks
82.	de Oliveira Melo M, 2016 (82)	Physical	Knee	433	no	32 weeks
83.	Decaria JE, 2012 (83)	Pharmacologic	Knee	428	yes	4 weeks

84.	Di Sante L, 2012 (84)	Combined	Knee	141	yes	52 weeks
85.	Dilek B, 2013 (85)	Physical	Hand	30	no	1 year
86.	Dıraçoğlu D, 2016 (86)	Alternative	Knee	60	yes	1 month
87.	Dumais R, 2012 (87)	Alternative	Knee	97	no	12 weeks
88.	Duman I, 2012 (88)	Physical	Knee	422	no	14 days
89.	Dündar Ü, 2016 (89)	Physical	Knee	not precised	no	4 weeks
90.	Durmus D, 2013 (90)	Combined	Knee	67	yes	12 weeks

91.	Duymus TM, 2016 (91)	Alternative	Knee	74	no	24 weeks
92.	Dwyer L, 2015 (92)	Physical	Knee	465	yes	6 months
93.	Dziedzic K, 2015 (93)	Combined	Hand	76	no	12 months
94.	Ekman EF, 2014, study 1015 (94)	Pharmacologic	Knee	47	no	24 weeks
95.	Ekman EF, 2014, study 1018 (94)	Pharmacologic	Hip and Knee	92	no	24 weeks
96.	Elboim Gabyzon M, 2013 (95)	Physical	Knee	38	no	12 months
97.	Ertürk C, 2016 (96)	Combined	Knee	273	no	12 months

98.	Essex MN, 2016 (97)	Pharmacologic	Knee	112	yes	27 weeks
99.	Fazaa A, 2014 (98)	Alternative	Knee	22	no	3 months
100.	Fioravanti A, 2012 (99)	Alternative	Knee	166	no	25 weeks
101.	Fioravanti A, 2014 (100)	Alternative	Hand	49	no	not precised
102.	Fioravanti A, 2015 (101)	Alternative	Knee	148	no	24 months
103.	Focht BC, 2012 (102)	Combined	Knee	239	no	4 weeks
104.	Focht BC, 2014 (103)	Combined	knee	100	no	3 months

105.	Forogh B, 2016 (104)	Combined	Knee	281	no	6 weeks
106.	Fransen M, 2015 (105)	Alternative	Knee	40	no	12 weeks
107.	French HP, 2013 (106)	Physical	Knee	148	no	4 months
108.	Fujii T, 2014 (107)	Pharmacologic	Hip	848	no	24 months
109.	Fukumoto Y, 2014 (108)	Physical	Hip	74	no	6 months
110.	Gallelli L, 2013 (109)	Pharmacologic	Knee	112	no	6 months
111.	Garg S, 2013 (110)	Pharmacologic	Knee	103	no	12 months

112.	Garcia-Padilla S, 2015 (111)	Alternative	Knee	51	no	18 months
113.	Geng XL, 2015 (112)	Alternative	Various joints	128	yes	52 weeks
114.	Ghoochani N, 2016 (113)	Alternative	Knee	58	no	6 months
115.	Giarratana LS, 2014 (114)	Alternative	Knee	44	no	3 months
116.	Gibofsky A, 2014 (115)	Pharmacologic	Hip or Knee	not precised	no	3 months
117.	Gobbi A, 2015 (116)	Alternative	Knee	87	no	8 weeks
118.	Gökşen N, 2016 (117)	Physical	Knee	117	no	18 weeks

119.	Gopal Nambi S, 2017 (118)	Physical	Knee	40	no	8 weeks
120.	Gordo AC, 2017 (119)	Pharmacologic	Knee	54	no	4 weeks
121.	Görmeli G, 2017 (120)	Alternative	Knee	212	yes	12 months
122.	Gow JM, 2015 (121)	Pharmacologic	Knee	69	no	9 months
123.	Guarda-Nardini L, 2012 (122)	Alternative	Temporo mandibular	192	no	12 months
124.	Gudbergsen H, 2012 (123)	Behavioral	Knee	90	no	2 months
125.	Ha CW, 2015 (124)	Genetic engineering	Knee	96	no	12 weeks

126.	Ha CW, 2016 (125)	Alternative	Knee	27	no	18 months
127.	Halstead J, 2016 (126)	Assistive devices	Midfoot	68	no	26 weeks
128.	Hatef MR, 2014 (127)	Assistive devices	Knee	61	no	3 weeks
129.	Hegab AF, 2015 (128)	Alternative	Temporo mandibular joint	312	no	6 weeks
130.	Helianthi DR, 2016 (129)	Physical	Knee	350	yes	12 weeks
131.	Hellio le Graverand, MP, 2013 (130)	Pharmacologic	Knee	41	no	3 months
132.	Helminen EE, 2015 (131)	Psychologic	Knee	174	yes	26 weeks

133.	Hennig T, 2015 (132)	Physical	Hand	180	no	12 months
134.	Henriksen M, 2014 (133)	Physical	Knee	154	no	38 weeks
135.	Henriksen M, 2015 (134)	Pharmacologic	Knee	1048	yes	2 years
136.	Hermann A, 2016 (135)	Physical	Hip	not precised	no	7 years
137.	Hermann M, 2013 (136)	Combined	Thumb	291	no	12 months
138.	Hill CL, 2015 (137)	Alternative	Knee	60	no	4 weeks
139.	Hinman RS, 2016 (138)	Assistive devices	Knee	50	no	6 months

140.	Hochberg MC, 2016 (139)	Combined	Knee	53	no	6 months
141.	Horng HC, 2013 (140)	Alternative	Knee	153	no	24 weeks
142.	Housman L, 2014 (141)	Combined	Knee	40	no	6 weeks
143.	Hsieh RL, 2012 (142)	Physical	Knee	68	no	29 month
144.	Hsieh RL, 2016 (143)	Assistive devices	Knee	79	no	1 week
145.	Huggins JP, 2012 (144)	Pharmacologic	Knee	341	no	9 months
146.	Hunt MA, 2013 (145)	Combined	Knee	40	no	12 weeks

147.	Hunter D, 2012 (146)	Assistive devices	Knee	221	no	12 weeks
148.	Hunter DJ, 2015 (147)	Combined	Knee	34	no	8 weeks
149.	Iannitti T, 2012 (148)	Alternative	Knee	84	no	3 weeks
150.	Imamura M, 2017 (149)	Physical	Knee	40	no	4 weeks
151.	Imoto AM, 2013 (150)	Physical	Knee	90	no	52 weeks
152.	Ip D, 2015 (151)	Combined	Knee	46	no	12 weeks
153.	Ip D, 2015(152)	Physical	knee	111	no	12 months

154.	Ishijima M, 2014 (153)	Combined	Knee	60	yes	6 months
155.	Jabbari M, 2016 (154)	Combined	Knee	82	no	12 weeks
156.	Jahangiri A, 2016 (155)	Alternative	thumb carpomet acarpal	100	no	6 years
157.	Jin X, 2016 (156)	Alternative	Knee	101	no	2 weeks
158.	Jones RK, 2013 (157)	Assistive devices	Knee	162	no	24 weeks
159.	Jorge RT, 2015 (158)	Physical	Knee	not precised	no	12 months
160.	Kanat E, 2013 (159)	Physical	Hand	44	no	4 weeks

161.	Kapadia BH, 2016 (160)	Assistive devices	Knee	150	no	12 months
162.	Karsdal MA, 2015, , study CSMC021C2302 (161)	Alternative	Knee	454	no	24 weeks
163.	Karsdal MA, 2015, study CSMC021C2301 (161)	Alternative	Knee	394	no	24 weeks
164.	Kasemsuk T, 2016 (162)	Alternative	Knee	103	no	6 weeks
165.	Khanasuk Y, 2012 (163)	Alternative	Knee	149	no	6 months
166.	Kheshie AR, 2014 (164)	Physical	Knee	233	no	3 years
167.	Kılıç S, 2016 (165)	Combined	temporo mandibular	435	no	12 months

168.	Kim IS, 2012 (166)	Physical	Various joints	98	no	24 weeks
169.	Kim TW, 2015 (167)	Alternative	Knee	28	no	6 weeks
170.	Knoop J, 2013 (168)	Physical	knee	59	no	6 weeks
171.	Kocyigit F, 2015 (169)	Physical	Knee	58	no	3 weeks
172.	Koley M, 2015 (170)	Alternative	Knee	87	yes	12 months
173.	Koli J, 2015 (171)	Physical	Knee	118	no	2 months
174.	Kovács C, 2012 (172)	Alternative	Hand	90	yes	48 weeks

175.	Kovács C, 2016 (173)	Combined	Hip	40	no	12 weeks
176.	Kudo M, 2013 (174)	Physical	Knee	41	no	8 weeks
177.	Kulisch A, 2014 (175)	Alternative	Knee	20	no	4 weeks
178.	Kumar S, 2015 (176)	Alternative	Knee	203	no	3 months
179.	Kuptniratsaikul V, 2014 (177)	Combined	Knee	364	yes	52 weeks
180.	Kwon YW, 2013 (178)	Alternative	Shoulder	30	no	12 weeks
181.	Lao L, 2015 (179)	Alternative	Knee	66	no	12 months

182.	Laslett LL, 2012 (180)	Alternative	Knee	75	no	Outcome measurements were obtained before and during a single TENS treatment
183.	Laslett LL, 2012 (181)	Pharmacologic	Knee	251	no	8 week
184.	Laufer Y, 2014 (182)	Physical	Knee	55	no	52 weeks
185.	Lee MC, 2015 (183)	genetic engineering	Knee	60	no	3 months
186.	Leighton R, 2014 (184)	Combined	Knee	88	no	6 months
187.	Lohmander LS, 2014 (185)	Alternative	Knee	57	no	12 months
188.	Lomonte AB, 2015 (186)	Pharmacologic	knee	60	no	3 months

189.	Lu DF, 2013 (187)	Alternative	Knee	103	no	2 weeks
190.	Lugo JP, 2016 (188)	Alternative	Knee	34	no	6 weeks
191.	Luksurapan W, 2013 (189)	Physical	Knee	34	no	12 weeks
192.	Lun V, 2015 (190)	Physical	Knee	49	no	12 weeks
193.	Madani AS, 2014 (191)	Physical	Temporo mandibular joint	95	yes	24 weeks
194.	Madhu K, 2013 (192)	Alternative	Knee	30	no	8 weeks
195.	Magana-Villa MC, 2013 (193)	Pharmacologic	Knee	109	no	6 months

196.	Mahdavi A, 2016 (194)	Alternative	Knee	50	no	4 weeks
197.	Maheu E, 2014 (195)	Alternative	Hip	not precised	no	8 weeks
198.	Malas UF, 2013 (196)	Physical	Knee	113	no	4 weeks
199.	Malek Mahdavi A, 2015 (197)	Alternative	Knee	233	no	12 months
200.	Marra CA, 2012 (198)	Combined	knee	not reported	no	4 weeks
201.	Martin-Martin LS, 2016 (199)	Alternative	Knee	131	no	2 months
202.	Martins F, 2014 (200)	Physical	Hip and Knee	18	no	12 weeks

203.	Mascarin NC, 2013 (201)	Physical	Knee	121	no	6 months
204.	Mattiello-Sverzut AC, 2013 (202)	Combined	knee	28	no	12 weeks
205.	Mavrommatis CI, 2012 (203)	Combined	Knee	341	no	9 months
206.	McAlindon T, 2013 (204)	Pharmacologic	Knee	61	no	12 weeks
207.	Melo Mde O, 2015 (205)	Physical	Knee	56	no	30 weeks
208.	Messier SP, 2013 (206)	Combined	Knee	24	no	42 days
209.	Mikkelsen LR, 2012 (207)	Physical	Hip	213	no	6 weeks

210.	Mizusaki Imoto A, 2013 (208)	Physical	Knee	144	no	4 weeks
211.	Moe RH, 2016 (209)	Behavioral	hand, hip, knee, or generalized OA	67	no	19 months
212.	Monfort J, 2015 (210)	Combined	thumb carpometacarpal	68	no	4 weeks
213.	Mont MA, 2015 (211)	Assistive devices	Knee	52	no	3 months
214.	Montanez-Heredia E, 2016 (212)	Alternative	Knee	70	no	6 months
215.	Morris M, 2016 (213)	Combined	OA of the lumbar spine	50	no	3 months
216.	Mu R, 2016 (214)	Pharmacologic	Knee	70	no	12 weeks

217.	Multanen J, 2014 (215)	Physical	Knee	90	yes	26 weeks
218.	Murphy SL, 2016 (216)	Behavioral	Hip or Knee	221	yes	12 weeks
219.	Nakagawa Y, 2014 (217)	Alternative	Knee	69	no	70 days
220.	Nelson FR, 2013 (218)	Physical	Knee	620	no	2 weeks
221.	Nelson FR, 2015 (219)	Alternative	Knee	41	no	12 days
222.	Niempoog S, 2012 (220)	Combined	Knee	450	no	12 weeks
223.	Nishii T, 2013 (221)	Pharmacologic	Hip	not reported	no	12 weeks

224.	Notarnicola A, 2016 (222)	Alternative	Knee	67	no	19 months
225.	Ohtori S, 2013 (223)	Pharmacologic	Knee	not precised	no	6 months
226.	Ojoawo AO, 2016 (224)	Physical	Knee	50	no	4 weeks
227.	Oliveira AM, 2012 (225)	Physical	Knee	91	no	1 year
228.	Østerås N, 2014 (226)	Physical	Hand	not reported	no	6 weeks
229.	Palmer S, 2014 (227)	Combined	Knee	42	no	2 years
230.	Palmieri B, 2013 (228)	Combined	Knee	not reported	yes	64 weeks

231.	Panahi Y, 2014 (229)	Alternative	Knee	41	no	12 weeks
232.	Paolillo AR, 2015 (230)	Physical	Hand	not precised	no	6 months
233.	Paramdeep G, 2013 (231)	Alternative	Knee	46	no	2 weeks
234.	Park YG, 2013 (232)	Combined	Knee	45	no	6 weeks
235.	Pascarelli NA, 2016 (233)	Alternative	Knee	323	no	12 weeks
236.	Patel S, 2013 (234)	Alternative	Knee	42	no	12 months
237.	Paterson KL, 2016 (235)	Alternative	Knee	381	yes	32 weeks

238.	Petrella RJ, 2015 (236)	Alternative	Knee	79	no	2 years
239.	Plaster R, 2014 (237)	Physical	Knee	48	no	12 h post-injection.
240.	Poulsen E, 2013 (238)	Combined	Knee	19	no	12 weeks
241.	Prior MJ, 2014 (239)	Pharmacologic	hip or knee	70	no	7 years
242.	Provenza JR, 2015 (240)	Alternative	Knee	70	no	4 weeks
243.	Puente R, 2014 (241)	Alternative	Knee, hip, or fingers	12	no	9 weeks
244.	Qiqing C, 2015 (242)	Alternative	Knee	73	no	24 weeks

245.	Rabago D, 2013 (243)	Combined	Knee	60	no	6 weeks
246.	Rabini A, 2012 (244)	Physical	Knee	30	no	12 months
247.	Rabini A, 2015 (245)	Physical	Knee	170	no	12 weeks
248.	Railhac JJ, 2012 (246)	Alternative	Knee	60	no	2 months
249.	Rauck R, 2013 (247)	Pharmacologic	Hip and knee	36	no	16 weeks
250.	Reginster JY, 2013 (248)	Pharmacologic	Knee	89	no	26 weeks
251.	Rini C, 2015 (249)	Behavioral	Hip and Knee	not precised	no	24 weeks

252.	Ripa SR 2012 (250)	Pharmacologic	Hip and knee	not precised	no	12 weeks
253.	Romero-Cerecero O, 2013 (251)	Combined	Hand	1371	no	3 years
254.	Rosedale R, 2014 (252)	Physical	Knee	not precised	no	6 months
255.	Rossini M, 2015 (253)	Pharmacologic	Knee	340	yes	2 years
256.	Rother M, 2013 (254)	Pharmacologic	Knee	99	no	6 weeks
257.	Saccomanno MF, 2016 (255)	Combined	Knee	30	no	not reported
258.	Salacinski AJ, 2012 (256)	Physical	Knee	47	no	12 weeks

259.	Samut G, 2015 (257)	Physical	Knee	171	no	6 months
260.	Sanchez M, 2012 (258)	Pharmacologic	Knee	64	no	2 weeks
261.	Sanga P, 2013 (259)	Pharmacologic	Hip or Knee	60	no	not reported
262.	Sanghi D, 2013 (260)	Pharmacologic	Knee	43	no	3 months
263.	Saraboon Y, 2015 (261)	Behavioral	Knee	30	no	6 months
264.	Schencking M, 2013 (262)	Physical	Hip or knee	78	no	12 weeks
265.	Schnitzer TJ, 2015 (263)	Pharmacologic	Hip or Knee	35	no	3 months

266.	Schumacher HR, 2013 (264)	Alternative	Knee	349	no	12 weeks
267.	Schwappach J, 2017 (265)	Combined	Knee	90	no	7 weeks
268.	Segal NA, 2015 (266)	Physical	Knee	175	yes	16 weeks
269.	Shin K, 2013 (267)	Pharmacologic	Hand	124	no	3 months
270.	Shoara R, 2015 (268)	Alternative	Knee	37	no	12 weeks
271.	Shue J, 2016 (269)	Behavioral	Hip and Knee	35	no	3 months
272.	Simão AP, 2012 (270)	Physical	Knee	39	no	19 days

273.	Simental-Mendia M, 2016 (271)	Combined	Knee	40	no	not reported
274.	Singh S, 2016 (272)	Physical	Knee	82	no	18 months
275.	Skou ST, 2015 (273)	Physical	Knee	38	no	6 weeks
276.	Smith PA, 2016 (274)	Alternative	Knee	26	no	14 weeks
277.	Somers TJ, 2012 (275)	Psychologic	Knee	193	yes	13 weeks
278.	Soni A, 2012 (276)	Combined	Knee	not precised	no	20 weeks
279.	Soriano-Maldonado A, 2016 (277)	Combined	Knee	122	no	18 months

280.	Spierings EL, 2013 (278)	Pharmacologic	Hip or knee	736	no	16 weeks
281.	Spolidoro Paschoal Nde O, 2015 (279)	Pharmacologic	Hand IP	47	no	24 weeks
282.	Srivastava S, 2016 (280)	Alternative	Knee	260	no	24 weeks
283.	Stebbins S, 2016 (281)	Alternative	Hip and Knee	34	no	8 weeks
284.	Sterzi S, 2016 (282)	Combined	Knee	6	no	14 days
285.	Stukstette MJ, 2013 (283)	Combined	Hand	48	no	6 months
286.	Suen LK, 2016 (284)	Alternative	Knee	not precised	no	6 weeks

287.	Sun SF, 2017 (285)	Alternative	Knee	66	yes	1 year
288.	Svege I, 2015 (286)	Physical	Hip	44	no	12 weeks
289.	Svege I, 2016 (287)	Combined	Hip	23	no	3 months
290.	Tammachote N, 2016 (288)	Alternative	Knee	391	yes	24 weeks
291.	Tashiro T, 2012 (289)	Alternative	Knee	30	no	6 weeks
292.	Tefner IK, 2013 (290)	Alternative	Knee	100	no	16 weeks
293.	Teirlinck CH, 2016 (291)	Physical	Hip	102	no	12 months

294.	Teslim OA, 2013 (292)	Physical	Knee	37	no	4 weeks
295.	Teut M, 2012 (293)	Alternative	Knee	147	no	12 weeks
296.	Tiseo PJ, 2014 (294)	Pharmacologic	Knee	48	no	24 weeks
297.	Trombini-Souza F, 2015 (295)	Assistive devices	Knee	36	no	32 weeks
298.	Tsai PF, 2013 (296)	Physical	Knee	43	no	6 weeks
299.	Tsai PF, 2015 (297)	Physical	Knee	not reported	no	4 weeks
300.	van der Vegt AE, 2017 (298)	Assistive devices	thumb carpometacarpal	118	no	12 weeks

301.	van der Weegen W, 2015 (299)	Alternative	Knee	55	no	2 months
302.	van Velden DP, 2015 (300)	Alternative	Hand	59	no	7 weeks
303.	Vance CG, 2012 (301)	Physical	Knee	70	no	3 months
304.	Vaquerizo V, 2013 (302)	Alternative	Knee	40	no	3 months
305.	Varadi G, 2013 (303)	Alternative	Knee	44	no	8 weeks
306.	Varennna M, 2015 (304)	Pharmacologic	Knee	502	yes	2 years
307.	Vega A, 2015 (305)	Alternative	Knee	not precised	no	126 days

308.	Verbruggen G, 2012 (306)	Pharmacologic	Interphalangeal finger joints	not precised	no	4 weeks
309.	Verkleij SP, 2015 (307)	Pharmacologic	Knee	50	no	6 weeks
310.	Villafae JH, 2013 (308)	Physical	thumb carpometacarpal	167	no	14 days
311.	Vitiello MV, 2013(309)	Psychologic	not reported	192	yes	1 year
312.	Von Korff M, 2012 (310)	Psychologic	Knee	176	yes	3 months
313.	Wadsworth LT, 2016 (311)	Pharmacologic	Knee	49	no	16 weeks
314.	Wageck B, 2016 (312)	Physical	Knee	60	no	1 month

315.	Wang C, 2016 (313)	Physical	Knee	96	no	12 months
316.	Wang P, 2016 (314)	Physical	Knee	90	no	6 months
317.	Weiner DK, 2013 (315)	Physical	Knee	18	no	3 months
318.	Wenham CY, 2012 (316)	Pharmacologic	Hand	99	no	6 months
319.	Witteveen AG, 2013 (317)	Alternative	Ankle	150	no	6 months
320.	Xin Y, 2016 (318)	Alternative	Knee	314	no	24 weeks
321.	Yataba I, 2017 (319)	Pharmacologic	Knee	44	no	4 weeks

322.	Yavuz U, 2012 (320)	Pharmacologic	Knee	319	yes	26 weeks
323.	Yildiz SK, 2015 (321)	Physical	Knee	120	no	24 weeks
324.	Yoo MC, 2014 (322)	Pharmacologic	knee	50	no	1 month
325.	Yoo WH, 2014 (323)	Pharmacologic	Knee	69	no	8 weeks
326.	Zamani O, 2014 (324)	Pharmacologic	Knee	101	yes	16 weeks
327.	Zawadzki M, 2013 (325)	Alternative	knee and/or hip	81	no	12 months
328.	Zegels B, 2013 (326)	Alternative	Knee	50	no	12 weeks

329.	Zhang H, 2015 (327)	Alternative	Knee	258	no	12 weeks
330.	Zhang H, 2015 (328)	Alternative	Knee	87	no	8 weeks
331.	Zhang Q, 2016 (329)	Alternative	Knee	34	no	12 weeks
332.	Zhang XL, 2016 (330)	Alternative	Knee	82	no	12 weeks
333.	Zhao L, 2014 (331)	Alternative	Knee	not reported	no	12 month
334.	Zhao Z, 2013 (332)	Physical	Knee	119	yes	6 months

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Supplementary Table 2. Type and frequency of all outcome measures used for core outcome set recommended by Outcome Measures in Rheumatology (OMERACT) initiative in randomized controlled trials about conservative interventions for osteoarthritis

Outcome domain	Outcome measure	N (%)
Pain (N=323)	Visual Analogue Scale (VAS)	187 (58)
	Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) pain	181 (56)
	Numeric Rating Scale (11-point NRS)	23 (7.1)
	Knee Injury and Osteoarthritis Outcome Score (KOOS) questionnaire	23 (7.1)
	Lequesne index score	19 (5.9)
	Pressure Pain Thresholds	10 (3.1)
	Australian/Canadian Osteoarthritis Hand Index (AUSCAN) pain subscale	8 (2.5)
	Brief Pain Inventory	5 (1.6)

Likert Scale (1-10)	3 (0.93)
Hip disability and Osteoarthritis Outcome Score (HOOS)	3 (0.93)
Duruöz and AUSCAN Hand Osteoarthritis Indexes	2 (0.62)
Arthritis Impact Measurement Scales 2 (AIMS2)	2 (0.62)
Overall knee pain	2 (0.62)
Harris Hip Score	2 (0.62)
Japanese Knee Osteoarthritis Measure (JKOM) score	2 (0.62)
Chronic Pain Scale	2 (0.62)
Pain on movement	2 (0.62)
Number of body regions indicated as painful on a body map	2 (0.62)
Pain at motion	2 (0.62)

7-point ordinal scale	1 (0.31)
McGill pain questionnaire	1 (0.31)
Nottingham Health Profile (NHP)	1 (0.31)
4 point categorical scale	1 (0.31)
5-point verbal rating scale	1 (0.31)
10 point semantic pain differential scale	1 (0.31)
Intermittent and Constant Osteoarthritis Pain (ICOAP)	1 (0.31)
PainDetect-Questionnaire (PD-Q)	1 (0.31)
Verbal rating scale	1 (0.31)
Wong–Baker Faces Pain Rating Scale	1 (0.31)
Foot Pain and Disability Index (MFPDI)	1 (0.31)
Algofunctional Index (AFI)	1 (0.31)
Tampa scale for Kinesiophobia (TSK)	1 (0.31)
Hospital for Special Surgery Knee Score (HSS)	1 (0.31)

Paper Adaptive Test-5D (PAT-5D) pain attributes	1 (0.31)
Osteoarthritis average-related pain intensity (OAPI)	1 (0.31)
Pain Test Force Dial FDK 20	1 (0.31)
Combined pain score	1 (0.31)
Pain at rest	1 (0.31)
Simple descriptive intensity score	1 (0.31)
Numeric distress scale	1 (0.31)
Arthritis Impact	1 (0.31)
Patient Health Questionnaire depression scale (PHQ-8)	1 (0.31)
4-Item Pain Intensity Measure (P4)	1 (0.31)
Knee pain scale (KPS) frequency score	1 (0.31)
Pain after exercise	1 (0.31)
Morning pain	1 (0.31)

	Night pain	1 (0.31)
	Recorded in a daily diary	1 (0.31)
	Lysholm Knee Scale	1 (0.31)
	The Iowa Pain Thermometer (IPT)	1 (0.31)
Physical functioning (N=282)	Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) function	171 (61)
	Muscle strength	42 (15)
	Range of motion (active / passive)	37 (13)
	Timed up-and-go test (TUG)	29 (10)
	Lequesne index	26 (9.3)
	6-min walk test (6MWD)	24 (8.5)
	Knee Injury and Osteoarthritis Outcome Score (KOOS)	21 (7.5)
	Stair-climb test	17 (6)

	Short form 36 health survey questionnaire (SF-36)	12 (4.3)
	Walking speed	11 (3.9)
	30-s chair-stand test	8 (2.8)
	Handgrip and pinchgrip strength (HPS)	8 (2.8)
	Duruöz and Auscan Hand Osteoarthritis Indexes	7 (2.5)
	20 meter walking	7 (2.5)
	Visual Analogue Scale (VAS)	6 (2.1)
	Physical Activity Scale for the Elderly (PASE)	5 (1.8)
	10-m timed walk	5 (1.8)
	Lower Extremities Function Scale (LEFS)	5 (1.8)
	Functional Index for Hand Osteoarthritis (FIHOA)	4 (1.4)
	Patient Specific Functioning List (PSFL)	4 (1.4)

40 m (4x10) fast paced walk test	4 (1.4)
Get up and go test (GUG)	4 (1.4)
Hip Disability and Osteoarthritis Outcome Score (HOOS)	3 (1.1)
Squatting	3 (1.1)
50-foot walk time	3 (1.1)
Knee stability	3 (1.1)
Single-leg stance test	3 (1.1)
Lateral pinch	3 (1.1)
7-point ordinal scale	2 (0.71)
Likert Scale	2 (0.71)
Short Physical Performance Battery	2 (0.71)
Arthritis Impact Measurement Scales 2 (AIMS2)	2 (0.71)
Stanford Health Assessment Questionnaire (HAQ) Disability Index	2 (0.71)

KOOS-Physical Function Short-form (KOOS-PS)	2 (0.71)
Standing	2 (0.71)
2-km Walk Test	2 (0.71)
Proprioception	2 (0.71)
Long Distance Corridor Walk (LDCW) test	2 (0.71)
Balance	2 (0.71)
Step length	2 (0.71)
Muscle morphology	2 (0.71)
American Shoulder and Elbow Surgeons (ASES) score	1 (0.35)
Cochin Hand Functional index	1 (0.35)
Tegner and Marx score	1 (0.35)
Edinburgh Knee Function Scale	1 (0.35)

	The Five-City Project Physical Activity Recall	1 (0.35)
	Lysholm Knee Scoring Scale	1 (0.35)
	Saudi Knee Function Scale (SKFS)	1 (0.35)
	Knee discomfort during exercises	1 (0.35)
	Disabilities of the Arm, Shoulder and Head (DASH)	1 (0.35)
	Harris Hip Score	1 (0.35)
	Katz activity of daily living	1 (0.35)
	Daily Impact Score (DISLog)	1 (0.35)
	Knee Quality of Life 26-item questionnaire (KQoL-26)	1 (0.35)
	Berg Balance Scale	1 (0.35)
	Jebesen Taylor Hand Function test (JTHFT)	1 (0.35)

	Short Questionnaire to Assess Health (SQUASH)	1 (0.35)
	Seven Day Physical Activity Recall (7-day PAR)	1 (0.35)
	Nine Hole Peg Test (NHPT)	1 (0.35)
	25 m walk test (s)	1 (0.35)
	Functional tests (Hops, Knee bends)	1 (0.35)
	Basic Lower Limb Function score (LLFDI)	1 (0.35)
	Walking questionnaire (WQ35)	1 (0.35)
	Climbing stairs questionnaire (CStQ15)	1 (0.35)
	Rising and sitting down questionnaire (QR&S39)	1 (0.35)
	Stride length	1 (0.35)
	Grip ability test (GAT)	1 (0.35)
	Hip abductor strength	1 (0.35)

	Hand dexterity	1 (0.35)
	Maximum mouth opening	1 (0.35)
	Knee Society Scale functional score (KSS)	1 (0.35)
	The 3-min walking test	1 (0.35)
	Australian/Canadian Osteoarthritis Hand Index (AUSCAN)	1 (0.35)
	15-m walking time test	1 (0.35)
Patient global assessment (N=58)	Likert scales	16 (28)
	VAS scales	11 (19)
	5-point scale	10 (17)
	Patient Global Impression of Change (PGIC)	8 (14)
	Patient Global Assessment score (PGA)	5 (8.6)
	Categorical scale, with seven categories: “very good,” “good,” “slightly good,” “unchanged,” “slightly bad,” “bad,” and	3 (5.2)

	“very bad.”	
	Eight-point scale	2 (3.5)
	Global perceived effect	2 (3.5)
	Numeric Rating Scale (11-point NRS)	1 (1.7)
Joint imaging for studies lasting 1 year or longer (N=21)	Joint space width/ narrowing	16 (76)
	Cartilage volume/thickness	7 (33)
	Bone marrow lesion	5 (24)
	Effusion synovitis score	2 (9.5)
	Synovial thickness	1 (4.8)