**Appendix Table F8. Risk of bias in therapeutic studies of physical therapy for adults with pain secondary to knee OA**

| **Reference** | **Masking of the treatment status** | **Intention to treat** | **Adequacy of collocation concealment** | **Adequacy of randomization** | **Risk of bias** |
| --- | --- | --- | --- | --- | --- |
| Adedoyin, 200 152 | Single blind | No | No | Yes | High |
| Adedoyin, 2005153 | Single blind | No | Not reported | No | High |
| Aglamis, 2008154 | Single blind | No | Not reported | No | High |
| Aglamiş, 200940 | Open | No | Not reported | No | High |
| Akyol, 2010155 | Single blind | No ITT planned, all patients analyzed | Not reported | Yes | Low |
| Alcidi, 2007156 | Open | No | Not reported | Not reported | Medium |
| An, 2008157 | Open | No | Not reported | Yes | Medium |
| Aoki, 2009158 | Single blind | No ITT planned, all patients analyzed | Not reported | Yes | Low |
| Ay, 2009159 | Single blind | No ITT planned, all patients analyzed | Not reported | Yes | Low |
| Baker, 2001160 | Single blind | No | Yes | Yes | Medium |
| Baker, 200716 | Double blind | No | Yes | Yes | Medium |
| Balint, 2007161 | Double blind | No | Not reported | Not reported | Medium |
| Bansil, 1975162 | Open | No | Not reported | Not reported | Medium |
| Barrios, 200985 | Single blind | Yes | Not reported | Yes | Low |
| Bar-Ziv, 2010163 | Single blind | No | Not reported | Not reported | Medium |
| Battisti, 2004164 | Open | No ITT planned, all patients analyzed | Not reported | Yes | Low |
| Bautch, 1997165 | Open | No | Not reported | No | High |
| Bennell, 2011166 | Double blind | Yes | Yes | Yes | Low |
| Bennell, 2010167 | Single blind | Yes | Yes | Yes | Low |
| Bennell, 2005168 | Double blind | Yes | Yes | Yes | Low |
| Bezalel, 2011169 | Single blind | Yes | Not reported | No | Medium |
| Borjesson, 1996170 | Open | No | Not reported | Yes | Medium |
| Brismee, 2007171 | Single blind | No | Not reported | Yes | Medium |
| Brouwer, 2006172 | Open | Yes | No | No | High |
| Bryk, 2011173 | Randomized order design | No | Not reported | Not reported | Medium |
| Burch, 2008174 | Single blind | No | Not reported | No | High |
| Callaghan, 2005175 | Double blind | No | Not reported | Yes | Medium |
| Callaghan, 1995176 | Single blind | No | Not reported | Not reported | Medium |
| Cantarini, 2007177 | Single blind | No ITT planned, all patients analyzed | Not reported | Yes | Low |
| Cetin, 2008178 | Single blind | No | Not reported | Yes | Medium |
| Chaipinyo, 2009179 | Single blind | No | Not reported | Yes | Medium |
| Chamberlain, 1982180 | Single blind | No | Not reported | No | High |
| Cheing, 2002181 | Open | No | Not reported | Yes | Medium |
| Cheing, 2004182 | Open | No | Not reported | No | High |
| Cheing, 2003183 | Open | No | Not reported | Yes | Medium |
| Chen, 2011184 | Double blind | ITT planned, but not executed | Yes | No | High |
| Chuang, 2007185 | Open | No ITT planned, all patients analyzed | Not reported | Yes | Low |
| Cushnaghan, 1994186 | Single blind | No ITT planned, all patients analyzed | Not reported | Not reported | Low |
| Defrin, 2005187 | Single blind | No ITT planned, all patients analyzed | Not reported | No | Medium |
| Denegar, 2010188 | Randomized order design | No | Not reported | Yes | Medium |
| Deyle, 2000189 | Single blind | No | Yes | Yes | Medium |
| Deyle, 2005190 | Single blind | No | Yes | Yes | Medium |
| Dıracoglu, 2005191 | Single blind | No | Not reported | Yes | Medium |
| Doi, 2008192 | Open | No | Not reported | Yes | Medium |
| Durmuş, 2007193 | Open | No ITT planned, all patients analyzed | Not reported | Yes | Low |
| Erhart, 2010194 | Single blind | No | Not reported | Yes | Medium |
| Ettinger, 1997195 | Single blind | Yes | Yes | Yes | Low |
| Eyigor, 2004196 | Single blind | No | Not reported | Yes | Medium |
| Falconer, 1992197 | Single blind | No | Not reported | Yes | Medium |
| Fargas-Babjak, 1989198 | Double blind | No | Not reported | Not reported | Medium |
| Farr, 201010 | Open | No | No | Yes | High |
| Fary, 2011199 | Double blind | Yes | Not reported | No | Medium |
| Fioravanti, 2010200 | Single blind | Yes | Not reported | Yes | Low |
| Fitzgerald, 2011201 | Single blind | Yes | Yes | No | Medium |
| Forestier, 2009202 | Open | ITT planned, but not executed | Yes | Yes | Medium |
| Foroughi, 2011203 | Single blind | No | Not reported | Yes | Medium |
| Fransen, 2001204 | Single blind | Yes | Yes | Yes | Low |
| French, 201049 | Single blind | No | Not reported | Not reported | Medium |
| Fukuda, 2011205 | Single blind | No | Yes | Yes | Medium |
| Gaines, 2004206 | Open | No | Not reported | No | High |
| Garland, 2007207 | Double blind | Yes | Not reported | Yes | Low |
| Giombini, 2011208 | Double blind | Yes | Yes | Yes | Low |
| Gordon, 1998209 | Single blind | No | Not reported | Yes | Medium |
| Gremion, 2009210 | Double blind | No | Not reported | Yes | Medium |
| Grimmer, 1992211 | Double blind | No | Not reported | Not reported | Medium |
| Gür, 2002212 | Open | No ITT planned, all patients analyzed | Not reported | Yes | Low |
| Hassan, 2001213 | Open | No | Not reported | Not reported | Medium |
| Hay, 2006214 | Single blind | ITT planned, but not executed | Yes | Yes | Medium |
| Hinman, 2003215 | Single blind | Yes | Yes | Yes | Low |
| Hinman, 2008216 | Randomized order design | No | Not reported | Not reported | Medium |
| Hinman, 200 217 | Double blind | No | Not reported | Yes | Medium |
| Hinman, 2009218 | Randomized order design | No | No | Not reported | High |
| Hinman, 2003219 | Randomized order design | No | Not reported | Not reported | Medium |
| Horlick, 1993220 | Open | No | Not reported | Not reported | Medium |
| Huang, 2003221 | Open | No | Yes | Not reported | Medium |
| Huang, 2005222 | Single blind | No | Yes | Not reported | Medium |
| Huang, 2005223 | Single blind | No | Yes | Not reported | Medium |
| Itoh, 2008224 | Open | No | Not reported | Yes | Medium |
| Jacobson, 2001225 | Double blind | No | Not reported | Not reported | Medium |
| Jan, 2009226 | Single blind | Yes | Not reported | Yes | Low |
| Jan, 2008227 | Single blind | ITT planned, but not executed | Not reported | Yes | Medium |
| Jan, 2008228 | Single blind | No | Not reported | Yes | Medium |
| Jensen, 1991229 | Open | No ITT planned, all patients analyzed | Not reported | Yes | Low |
| Jessep, 2009230 | Single blind | Yes | Yes | Yes | Low |
| Kang, 2007231 | Single blind | No | Not reported | Yes | Medium |
| Karagülle, 2007232 | Single blind | Yes | Not reported | Yes | Low |
| Keefe, 2004233 | Open | No | Not reported | Yes | Medium |
| Kerrigan, 2002234 | Randomized order design | Unclear | Not reported | Not reported | Not applicable |
| Kirkley, 199986 | Open | No | Not reported | Yes | Medium |
| Kitay, 2009235 | Single blind | No | Yes | Yes | Medium |
| Ko, 2009236 | Open | No ITT planned, all patients analyzed | Not reported | Yes | Low |
| Kovacs, 2002237 | Double blind | No | Yes | Not reported | Medium |
| Kovar, 1992238 | Open | No | Not reported | Yes | Medium |
| Kreindler, 1989239 | Open | No ITT planned, all patients analyzed | No | Yes | Medium |
| Kuptniratsaikul, 2002240 | Open | No | Not reported | Yes | Medium |
| Kuroyanagi, 2007241 | Randomized order design | Unclear | Not reported | Not reported | Not applicable |
| Laufer, 2005242 | Double blind | No | No | Yes | High |
| Law, 2004243 | Double blind | No | No | Yes | High |
| Law, 2004244 | Double blind | No | No | Yes | High |
| Lee, 2009245 | Single blind | Yes | Not reported | Yes | Low |
| Lim, 200820 | Single blind | Yes | Not reported | Yes | Low |
| Lim, 2002246 | Open | No | Not reported | Yes | Medium |
| Lin, 2009247 | Single blind | Yes | No | Yes | Medium |
| Lin, 2007248 | Single blind | No | Not reported | Yes | Medium |
| Loyola-Sánchez, 2012249 | Double blind | ITT planned, but not executed (for secondary outcomes) | Yes | Not reported | Medium |
| Lund, 2008250 | Single blind | Yes | Yes | No | Medium |
| Lund, 2009251 | Single blind | No ITT planned, all patients analyzed | Not reported | Yes | Low |
| Maillefert, 2001252 | Open | Yes | Not reported | Yes | Low |
| Maly, 2002253 | Randomized order design | No ITT planned, all patients analyzed | Not reported | Not reported | Low |
| Mangani, 2006254 | Single blind | No | Yes | Yes | Medium |
| Mangione, 1999255 | Open | No | Not reported | Yes | Medium |
| Maurer, 1999256 | Single blind | No | Not reported | Yes | Medium |
| Mazzuca, 2004257 | Double blind | No | Not reported | Yes | Medium |
| McCarthy, 2004258 | Single blind | Yes | Yes | Yes | Low |
| McKnight, 20109 | Open | Yes | Not reported | Yes | Low |
| Mikesky, 2006259 | Single blind | No | Not reported | Yes | Medium |
| Moss, 2007260 | Double blind | No | Not reported | Yes | Medium |
| Ng, 2003261 | Single blind | No ITT planned, all patients analyzed | Not reported | Yes | Low |
| Nguyen, 1997262 | Single blind | No | Not reported | Yes | Medium |
| Ni, 2010263 | Single blind | No | Yes | Yes | Medium |
| Nicolakis, 2002264 | Double blind | No | Yes | Yes | Medium |
| Nigg, 2006265 | Single blind | No | Not reported | Yes | Medium |
| Odabasi, 2008266 | Single blind | Yes | Not reported | Yes | Low |
| Oldham, 1995267 | Double blind | No | Not reported | Not reported | Medium |
| O'Reilly, 1999268 | Open | No | No | Yes | High |
| Ozdincler, 2005269 | Open | No | Not reported | Not reported | Medium |
| Özgönenel, 2009270 | Double blind | No ITT planned, all patients analyzed | Not reported | Yes | Low |
| Ozgüçlü, 2010271 | Double blind | No ITT planned, all patients analyzed | Not reported | Yes | Low |
| Pajareya, 2003272 | Single blind | ITT planned, but not executed | Yes | Yes | Medium |
| Palmieri-Smith, 201015 | Open | Yes | Yes | Yes | Low |
| Patrick, 2001273 | Open | No | Not reported | Yes | Medium |
| Péloquin 1999274 | Single blind | No | Yes | No | High |
| Perlman, 200619 | Open | Yes | Not reported | No | Medium |
| Petrella, 2000275 | Double blind | Yes | Not reported | Yes | Low |
| Pietrosimone, 2009276 | Single blind | No | No | Yes | High |
| Pietrosimone, 2010277 | Single blind | Unclear | Not reported | Yes | Low |
| Pipitone, 2001278 | Double blind | Yes | Yes | No | Medium |
| Pisters, 20103 | Single blind | ITT planned, but not executed | Not reported | Yes | Medium |
| Pollard, 2008279 | Open | No ITT planned, all patients analyzed | Not reported | Yes | Low |
| Rattanachaiyanont, 20088 | Double blind | Yes | Yes | No | Medium |
| Ravaud, 200912 | Open | Yes | Not reported | No | Medium |
| Rejeski, 2002280 | Single blind | ITT planned, but not executed | Yes | Yes | Low |
| Richards, 2005281 | Open | No | Not reported | Not reported | Medium |
| Rodrigues, 200821 | Single blind | No ITT planned, all patients analyzed | Not reported | Yes | Low |
| Røgind, 1998282 | Single blind | No | Not reported | Yes | Medium |
| Rooks, 2006283 | Single blind | ITT planned, but not executed | Not reported | Yes | Medium |
| Sayers, 2012284 | Single blind | ITT planned, but not executed | Not reported | Yes | Medium |
| Schilke, 1996285 | Open | No | Not reported | Yes | Medium |
| Segal, 2009286 | Single blind | No | Not reported | Yes | Medium |
| Selfe, 2008287 | Single blind | unclear | Yes | Yes | Low |
| Shakoor, 2007288 | Open | No ITT planned, all patients analyzed | Not reported | Yes | Low |
| Sherman, 2009289 | Single blind | No | Not reported | Yes | Medium |
| Silva, 2008290 | Single blind | Yes | Not reported | Yes | Low |
| Smith, 1983101 | Single blind | No | No | Not reported | High |
| Song, 2003291 | Single blind | No | Yes | Yes | Medium |
| Song, 2010292 | Single blind | No | Not reported | Yes | Medium |
| Swank, 2011293 | Open | No | No | Yes | High |
| Talbot, 2003294 | Open | No | Yes | No | High |
| Talbot, 2003295 | Open | No | Not reported | Yes | Medium |
| Tascioglu, 2010296 | Double blind | No | Not reported | Yes | Medium |
| Taylor 1981297 | Double blind | No | Not reported | Not reported | Medium |
| Thamsborg, 2005298 | Double blind | Yes | Not reported | Yes | Low |
| Thomas, 2002299 | Single blind | Yes | Not reported | Yes | Low |
| Thorstensson, 2005300 | Open | No | No | Yes | High |
| Tishler, 2004301 | Single blind | No | Not reported | Yes | Medium |
| Toda, 2004302 | Open | No ITT planned, all patients analyzed | No | Yes | Medium |
| Toda, 2005303 | Open | No ITT planned, all patients analyzed | No | Yes | High |
| Toda, 2001304 | Open | No ITT planned, all patients analyzed | No | Yes | Medium |
| Toda, 2008305 | Single blind | Yes | No | Yes | Medium |
| Toda, 2002306 | Open | No ITT planned, all patients analyzed | No | Yes | Medium |
| Toda, 2004307 | Open | No | No | Yes | High |
| Toda, 2006308 | Open | No | No | Yes | High |
| Tok, 2009309 | Open | No ITT planned, all patients analyzed | Not reported | Yes | Low |
| Topp, 2002310 | Open | No ITT planned, all patients analyzed | Not reported | Yes | Low |
| Trans, 2009311 | Single blind | Yes | Not reported | Yes | Low |
| Trock, 1994312 | Double blind | No | Yes | Yes | Medium |
| Tsauo, 2008313 | Single blind | No | Not reported | No | High |
| Tüzün, 2004314 | Open | No ITT planned, all patients analyzed | Not reported | Yes | Low |
| van Raaij, 2010315 | Open | Yes | Not reported | Yes | Low |
| Victor, 2005316 | Single blind | No | Not reported | Not reported | Medium |
| Wang, 2009317 | Single blind | Yes | Yes | Not reported | Low |
| Weiner, 2007318 | Single blind | Yes | Not reported | Yes | Low |
| Weng, 2009319 | Single blind | ITT planned, but not executed | Yes | Yes | Medium |
| Williamson, 2007320 | Single blind | Yes | Yes | Yes | Low |
| Wolsko, 2004321 | Double blind | No ITT planned, all patients analyzed | Yes | No | Medium |
| Wyatt, 2001322 | Single blind | No | Not reported | Not reported | Medium |
| Yilmaz, 2000323 | Open | No | Not reported | Yes | Medium |
| Yip, 2007324 | Open | Yes | Not reported | Yes | Low |
| Yip, 2008325 | Double blind | No | No | Yes | High |
| Yip, 2008326 | Open | ITT planned, but not executed | Not reported | Yes | Medium |
| Yurtkuran, 1999327 | Single blind | No ITT planned, all patients analyzed | Not reported | Yes | Low |
| Yurtkuran, 2006328 | Double blind | No | Not reported | Yes | Medium |
| Zizic, 1995329 | Double blind | No | Not reported | Yes | Medium |