|   |            | costeroids   |                  |                        | ontrol     |                  |                        | Std. Mean Difference                             | Std. Mean Difference |
|---|------------|--------------|------------------|------------------------|------------|------------------|------------------------|--|----------------------|
| tudy or Subgroup  | Mean       | SD           | Total            | Mean                   | SD         | Total            | Weight                 | IV, Random, 95% CI                               | IV, Random, 95% CI   |
| 1.1 Corticosteroids versus  | Control    |              |                  |                        |            |                  |                        |  |                      |
| debajo 1990   | 50.4       | 8.05         | 20               | 5.4                    | 10.47      | 20               | 15.0%                  | 4.72 [3.47, 5.98]                                |                      |
| erry 1980   | 100.6      | 37.7         | 12               | 120.8                  | 30.1       | 12               | 16.8%                  | -0.57 [-1.39, 0.25]                              | <del></del>          |
| ialanella 2011 one shot   | 14.8       | 8.6          | 20               | 16.4                   | 8.5        | 10               | 17.0%                  | -0.18 [-0.94, 0.58]                              | <del></del>          |
| ialanella 2011 two shots  | 16.7       | 6.7          | 20               | 16.4                   | 8.5        | 10               | 17.0%                  | 0.04 [-0.72, 0.80]                               | <del></del>          |
| ong 2011 high dose  | 161.1      | 25           | 27               | 137.6                  | 21.1       | 13               | 17.2%                  | 0.97 [0.27, 1.66]                                | _ <del></del>        |
| ong 2011 low dose   | 162.7      | 20.6         | 25               | 137.6                  | 21.1       | 14               | 17.1%                  | 1.18 [0.47, 1.89]                                |                      |
| ubtotal (95% CI)  | 102.7      | 20.0         | 124              | 137.0                  | 21.1       | 79               |                        | 0.96 [-0.17, 2.08]                               |                      |
| , ,   | i2 = E0 10 | df = E /D -  |                  | 11), 12 = 000          | ,          | 13               | 100.070                | 0.50 [-0.17, 2.00]                               |                      |
| eterogeneity: Tau² = 1.79; Cl<br>est for overall effect: Z = 1.67             |            |              | 0.0000           | 11); 1 927             | <b>'</b> 0 |                  |                        |  |                      |
| .1.2 Corticosteroids versus   | Active Cor | ntrol (Misc. | .)               |                        |            |                  |                        |  |                      |
| lvarez 2005   | 139        | 21.8         | 30               | 143.7                  | 27.8       | 28               | 8.3%                   | -0.19 [-0.70, 0.33]                              | <del>-</del>         |
| Ivarez-Nemegyei 2008  | 137        | 18           | 15               | 139                    | 23         | 17               | 5.9%                   | -0.09 [-0.79, 0.60]                              | +                    |
| erry 1980   | 100.6      | 37.7         | 12               | 95.6                   | 37.1       | 12               | 4.8%                   | 0.13 [-0.67, 0.93]                               | <del></del>          |
| elik 2009 Cortico   | 178.4      | 4.3          | 28               | 178.7                  | 6.3        | 28               | 8.2%                   | -0.05 [-0.58, 0.47]                              | +                    |
| hoi 2013 high Dose  | 177        | 9.5          | 10               | 175                    | 7          | 5                | 3.1%                   | 0.21 [-0.86, 1.29]                               | <del></del>          |
| hoi 2013 low Dose   | 179        | 3.2          | 10               | 175                    | 7          | 5                | 2.9%                   |  |                      |
|   | 179        | 13.3         |                  |                        |            |                  |                        | 0.80 [-0.32, 1.92]                               |                      |
| yigor 2010  |            |              | 20               | 159.3                  | 11.8       | 20               | 6.4%                   | 0.83 [0.19, 1.48]                                | <u></u>              |
| öksu 2015   | 142.9      | 16.11        | 31               | 132.2                  | 21.08      | 30               | 8.4%                   | 0.56 [0.05, 1.08]                                | <u> </u>             |
| im 2012   | 145        | 8.6          | 32               | 142.2                  | 14.5       | 29               | 8.5%                   | 0.23 [-0.27, 0.74]                               |                      |
| ee 2011   | 143.2      | 25.9         | 30               | 158.5                  | 30.4       | 31               | 8.4%                   | -0.53 [-1.05, -0.02]                             | -                    |
| adnovich 2014   | 122.4935   |              | 31               |                        | 28.987     | 29               | 8.5%                   | -0.12 [-0.63, 0.39]                              | _                    |
| hibata 2001   | 124.1375   | 34.8309      | 40               | 139.5                  | 30.3897    | 38               | 9.5%                   | -0.46 [-0.91, -0.01]                             | -                    |
| ubasi 2014  | 165.4      | 21.7         | 35               | 166.1                  | 14.5       | 35               | 9.1%                   | -0.04 [-0.51, 0.43]                              | +                    |
| ecchio 1993 Corticosteroid<br>ubtotal (95% CI)                                | 0          | 44.4444      | 28<br><b>352</b> | 0                      | 14.8148    | 27<br><b>334</b> | 8.1%<br><b>100.0</b> % | 0.00 [-0.53, 0.53]<br><b>0.03 [-0.18, 0.24</b> ] | <del> </del>         |
| eterogeneity: Tau <sup>2</sup> = 0.07; Cl<br>est for overall effect: Z = 0.27 |            | df = 13 (P = | = 0.04);         | ; I <sup>2</sup> = 44% |            |                  |                        |  |                      |
| .1.3 Corticosteroid versus I  | SAIDS      |              |                  |                        |            |                  |                        |  |                      |
| debajo 1990   | 50.4       | 8.05         | 20               | 46.8                   | 5.64       | 20               | 26.5%                  | 0.51 [-0.12, 1.14]                               | <del> </del>         |
| ift 2015  | 68.7       | 51.4         | 20               | 66.6                   | 12.4       | 20               | 27.0%                  | 0.06 [-0.56, 0.67]                               | +                    |
| lin 2013  | 0          | 31.68        | 15               | 22.06                  | 37.96      | 17               | 23.4%                  | -0.61 [-1.32, 0.10]                              | <del></del>          |
| /hite 1986  | 30         | 37           | 15               | 16                     | 45         | 15               | 23.1%                  | 0.33 [-0.39, 1.05]                               | <del> </del> -       |
| ubtotal (95% CI)  |            |              | 70               |                        |            | 72               | 100.0%                 | 0.08 [-0.38, 0.55]                               | •                    |
| eterogeneity: Tau² = 0.11; Cl<br>est for overall effect: Z = 0.35             |            | f = 3 (P = 0 | .12); I²         | = 49%                  |            |                  |                        |  |                      |
| .1.4 Local Corticosteroid ve  | rsus Syste | emic Cortic  | ostero           | oid                    |            |                  |                        |  |                      |
| keberg 2009   | 141        | 20.7407      | 53               | 121                    | 33.3333    |                  | 100.0%                 | 0.72 [0.32, 1.11]                                |                      |
| ubtotal (95% CI)  |            |              | 53               |                        |            | 53               | 100.0%                 | 0.72 [0.32, 1.11]                                | ▼                    |
| eterogeneity: Not applicable<br>est for overall effect: Z = 3.57              | (P = 0.000 | 4)           |                  |                        |            |                  |                        |  |                      |
| .1.5 US-Guided Injections   |            |              |                  |                        |            |                  |                        |  |                      |
| hen 2006  | 139.29     | 20.14        | 20               | 100                    | 18.8       | 20               | 31.5%                  | 1.98 [1.21, 2.75]                                | -                    |
| ogu 2012  | 37.22      | 3.06         | 23               | 35.57                  | 5.12       | 23               | 34.6%                  | 0.38 [-0.20, 0.97]                               | <del> </del>         |
| aghighat 2016   | 13.75      | 13.327       | 20               | 7.25                   | 15.4289    | 20               | 33.9%                  | 0.44 [-0.19, 1.07]                               | † <del>-</del>       |
| ubtotal (95% CI)  |            |              | 63               |                        |            | 63               | 100.0%                 | 0.91 [-0.03, 1.84]                               | •                    |
| eterogeneity: Tau² = 0.57; Cl<br>est for overall effect: Z = 1.90             |            | df = 2 (P =  | 0.002);          | ; I <sup>2</sup> = 84% |            |                  |                        |  |                      |
| .1.6 Corticosteroid plus NS   | AID versus | Kinesiota    | ping p           | lus NSAID              |            |                  |                        |  |                      |
| ahin 2016   | 37.3       | 5.8          | 33               | 34.8                   | 6.6        |                  | 100.0%                 |  |                      |
| ubtotal (95% CI)  |            |              | 33               |                        |            |                  | 100.0%                 |  | <b>▼</b>             |
| eterogeneity: Not applicable  |            |              |                  |                        |            |                  |                        | - · · · · · · · · · · ·                          |                      |
| est for overall effect: Z = 1.60  | (P = 0.11) |              |                  |                        |            |                  |                        |  |                      |
| .1.7 Corticosteroid plus NS   | AID versus | NSAID        |                  |                        |            |                  |                        |  | _                    |
| ahin 2016   | 37.3       | 5.8          | 33               | 13.6                   | 2.3        |                  | 100.0%                 | 5.31 [4.26, 6.36]                                | -                    |
| ubtotal (95% CI)  |            |              | 33               |                        |            | 33               | 100.0%                 |  |                      |
| eterogeneity: Not applicable  |            |              |                  |                        |            |                  |                        |  |                      |
| est for overall effect: Z = 9.90  | (P < 0.000 | 01)          |                  |                        |            |                  |                        |  |                      |
|   | (P < 0.000 | 01)          |                  |                        |            |                  |                        |  |                      |

Figure Appendix-4c 1. Steroids: Outcome AROM at the longest follow-up

| tudy or Subgroup  |   | costeroids   | T-1-1   |   | Control         | T-4                                      |  | Std. Mean Difference   | Std. Mean Difference |
|---|---|--|---|---|-----------------|--|--|--|----------------------|
|   | Mean  | SD   | Total   | Mean                                      | SD              | Total                                    | Weight                                       | IV, Random, 95% CI   | IV, Random, 95% CI   |
| .1 Corticosteroids vs. co   | ntrol   |  |   |   |                 |  |  |  |                      |
| erry 1980   | 100.6   | 37.7   | 12  | 120.8                                     | 30.1            | 12                                       | 18.6%  | -0.57 [-1.39, 0.25]  |                      |
| ialanella 2011 one shot   | 17  | 8.8  | 20  | 17  | 8.6             | 10                                       | 19.7%  | 0.00 [-0.76, 0.76]   | <del></del>          |
| ialanella 2011 two shots  | 20.1  | 8.7  | 20  | 17  | 8.6             | 10                                       | 19.6%  | 0.35 [-0.42, 1.11]   | <del>-   •</del>     |
| ong 2011 high dose  | 155.9   | 25.5   | 27  | 137.9                                     | 23              | 13                                       | 21.2%  | 0.71 [0.03, 1.39]  | -                    |
| ong 2011 low dose   | 160   | 17.3   | 25  | 137.9                                     | 23              | 14                                       | 20.8%  | 1.11 [0.41, 1.81]  |                      |
| ubtotal (95% CI)  |   |  | 104   |   |                 | 59                                       | 100.0%                                       | 0.34 [-0.21, 0.90]   |                      |
| eterogeneity: Tau <sup>2</sup> = 0.26; (  | Chi² = 11.20. d   | f = 4 (P = 0   | 02): I² =   | 64%                                       |                 |  |  | . , .  |                      |
| est for overall effect: Z = 1.2   |   | (  | 02), .  | 0170                                      |                 |  |  |  |                      |
| 1.2 Corticosteroids vs. ac  | tive control (r   | misc.)   |   |   |                 |  |  |  |                      |
| lvarez 2005   | 148.8   | 17.6   | 30  | 133.3                                     | 25.4            | 28                                       | 8.0%   | 0.70 [0.17, 1.24]  |                      |
| lvarez-Nemegyei 2008  | 130   | 24   | 15  | 134                                       | 27              | 17                                       | 6.1%   | -0.15 [-0.85, 0.54]  | <del></del>          |
| erry 1980   | 100.6   | 37.7   | 12  | 95.6                                      | 37.1            | 12                                       | 5.1%   | 0.13 [-0.67, 0.93]   | <del></del>          |
| elik 2009 Cortico   | 172.8   | 12.2   | 28  | 167.6                                     | 10.5            | 28                                       | 8.0%   | 0.45 [-0.08, 0.98]   | <del> </del>         |
| hoi 2013 high Dose  | 29.5  | 25.6   | 10  | 18.5                                      | 20.6            | 5  | 3.3%   |  |                      |
| •   |   |  |   |   |                 |  |  | 0.43 [-0.66, 1.52]   |                      |
| hoi 2013 low Dose   | 11  | 11.9   | 10  | 18.5                                      | 20.6            | 5  | 3.3%   | -0.47 [-1.56, 0.62]  |                      |
| yigor 2010  | 163.7   | 16.1   | 20  | 149.8                                     | 14.6            | 20                                       | 6.5%   | 0.89 [0.23, 1.54]  |                      |
| öksu 2015   | 136.94  | 15.74  | 31  | 125                                       | 21.05           | 30                                       | 8.2%   | 0.64 [0.12, 1.15]  |                      |
| im 2012   | 142.3   | 15   | 32  | 141                                       | 11.3            | 29                                       | 8.4%   | 0.10 [-0.41, 0.60]   | <del></del>          |
| ee 2011   | 152.4   | 26.3   | 30  | 157.3                                     | 27.5            | 31                                       | 8.4%   | -0.18 [-0.68, 0.32]  | <del></del>          |
| adnovich 2014   | 122.4935  | 42.5454  | 31  | 127.6364                                  | 28.987          | 29                                       | 8.4%   | -0.14 [-0.65, 0.37]  |                      |
| hibata 2001   | 124.1375  | 34.8309  | 40  | 139.5                                     | 30.3897         | 38                                       | 9.2%   | -0.46 [-0.91, -0.01]   |                      |
| ubasi 2014  | 159.7   | 20.2   | 35  | 160.5                                     | 19.9            | 35                                       | 8.9%   | -0.04 [-0.51, 0.43]  | <del></del>          |
| ecchio 1993 Corticosteroid  |   | 37.037037  | 28  |   | 14.8148148      | 27                                       | 8.1%   | 0.00 [-0.53, 0.53]   |                      |
| ubtotal (95% CI)  | 0   | 0001001  | 352   | U   | . 7.0 170 170   | 334                                      | 100.0%                                       | 0.13 [-0.09, 0.36]   |                      |
| eterogeneity: Tau² = 0.09; (  | 2hi2 = 26 77 -1   | f = 12 /D = /  |   | - E10/                                    |                 | 557                                      |  | 5.15 [ 5.65, 6.66]   |                      |
| est for overall effect: Z = 1.1   |   |  | ,,,,,   | 0170                                      |                 |  |  |  |                      |
| 1.3 Corticosteroid vs. NS/<br>ift 2015  |   | E1 1   | 20  | 66.6                                      | 10.4            | 20                                       | 27.00/                                       | 0.061056.0671  |                      |
|   | 68.7  | 51.4   | 20  | 66.6                                      | 12.4            | 20                                       | 37.0%  | 0.06 [-0.56, 0.67]   | <u>_</u>             |
| lin 2013  | 0   | 31.68  | 15  | 22.06                                     | 37.96           | 17                                       | 31.7%  | -0.61 [-1.32, 0.10]  | <u> </u>             |
| /hite 1986  | 30  | 37   | 15  | 16  | 45              | 15                                       | 31.3%  | 0.33 [-0.39, 1.05]   |                      |
| ubtotal (95% CI)<br>eterogeneity: Tau² = 0.09; (  | Chi² = 3.56 df  | = 2 (P = 0.1   | 50<br>7)· l² =  | 44%                                       |                 | 52                                       | 100.0%                                       | -0.07 [-0.60, 0.46]  |                      |
| est for overall effect: Z = 0.2   |   | 2 (1 0.1   | . ,, .  | 1170                                      |                 |  |  |  |                      |
| 1.4 Local Corticosteroid v  | ersus systen  | nic Corticos   | steroid   |   |                 |  |  |  |                      |
| keberg 2009   | 140   | 13.3333  | 52  | 133                                       | 28.1481         | 52                                       | 100.0%                                       | 0.32 [-0.07, 0.70]   | +                    |
| ubtotal (95% CI)  |   |  | 52  |   |                 |  | 100.0%                                       | 0.32 [-0.07, 0.70]   | <b>←</b>             |
| eterogeneity: Not applicable  |   |  |   |   |                 |  |  |  |                      |
| est for overall effect: $7 = 1.6$   |   |  |   |   |                 |  |  |  |                      |
| est for overall effect: Z = 1.6   |   | III lmia -4' -   | _   |   |                 |  |  |  |                      |
| 1.5 US-Guided Injections  | versus "Blind   |  |   |   |                 |  |  |  |                      |
| 1.5 US-Guided Injections<br>hen 2006  | versus "Blind<br>139.29   | 20.14  | 20  | 100                                       | 18.8            | 20                                       | 31.5%  | 1.98 [1.21, 2.75]  |                      |
| 1.5 US-Guided Injections  | versus "Blind   |  |   | 100<br>35.57                              | 18.8<br>5.12    | 20<br>23                                 | 31.5%<br>34.6%                               | 1.98 [1.21, 2.75]<br>0.38 [-0.20, 0.97]  |                      |
| 1.5 US-Guided Injections<br>hen 2006  | versus "Blind<br>139.29   | 20.14  | 20  |   |                 |  |  |  |                      |
| 1.5 US-Guided Injections<br>hen 2006<br>ogu 2012<br>aghighat 2016   | versus "Blind<br>139.29<br>37.22  | 20.14<br>3.06  | 20<br>23  | 35.57                                     | 5.12            | 23<br>20                                 | 34.6%  | 0.38 [-0.20, 0.97]   |                      |
| 1.5 US-Guided Injections<br>hen 2006<br>ogu 2012  | versus "Blind<br>139.29<br>37.22<br>13.75<br>Chi² = 12.16, d  | 20.14<br>3.06<br>13.327  | 20<br>23<br>20<br><b>63</b>   | 35.57<br>7.25                             | 5.12            | 23<br>20                                 | 34.6%<br>33.9%                               | 0.38 [-0.20, 0.97]<br>0.44 [-0.19, 1.07]   |                      |
| .1.5 US-Guided Injections<br>hen 2006<br>ogu 2012<br>aghighat 2016<br>ubtotal (95% CI)<br>eterogeneity: Tau² = 0.57; O<br>est for overall effect: Z = 1.9   | versus "Blind<br>139.29<br>37.22<br>13.75<br>Chi² = 12.16, d<br>90 (P = 0.06)   | 20.14<br>3.06<br>13.327<br>f = 2 (P = 0.                       | 20<br>23<br>20<br><b>63</b><br>002); I <sup>2</sup>                 | 35.57<br>7.25<br>= 84%                    | 5.12            | 23<br>20                                 | 34.6%<br>33.9%                               | 0.38 [-0.20, 0.97]<br>0.44 [-0.19, 1.07]   |                      |
| .1.5 US-Guided Injections hen 2006 ogu 2012 aghighat 2016 ubtotal (95% CI) eterogeneity: Tau² = 0.57; C est for overall effect: Z = 1.9   | 139.29<br>37.22<br>13.75<br>Chi² = 12.16, d<br>90 (P = 0.06)  | 20.14<br>3.06<br>13.327<br>f = 2 (P = 0.                       | 20<br>23<br>20<br><b>63</b><br>002); I <sup>2</sup>                 | 35.57<br>7.25<br>= 84%                    | 5.12<br>15.4289 | 23<br>20<br><b>63</b>                    | 34.6%<br>33.9%<br><b>100.0</b> %             | 0.38 [-0.20, 0.97]<br>0.44 [-0.19, 1.07]<br>0.91 [-0.03, 1.84]   |                      |
| .1.5 US-Guided Injections hen 2006 ogu 2012 aghighat 2016 ubtotal (95% CI) eterogeneity: Tau² = 0.57; Cest for overall effect: Z = 1.9 (1.6 Corticosteroid plus Nathin 2016   | versus "Blind<br>139.29<br>37.22<br>13.75<br>Chi² = 12.16, d<br>90 (P = 0.06)   | 20.14<br>3.06<br>13.327<br>f = 2 (P = 0.                       | 20<br>23<br>20<br><b>63</b><br>002); I <sup>2</sup><br>ng plus      | 35.57<br>7.25<br>= 84%                    | 5.12            | 23<br>20<br><b>63</b><br>33              | 34.6%<br>33.9%<br><b>100.0%</b>              | 0.38 [-0.20, 0.97]<br>0.44 [-0.19, 1.07]<br>0.91 [-0.03, 1.84]   |                      |
| .1.5 US-Guided Injections hen 2006 ogu 2012 aghighat 2016 ubtotal (95% CI) eterogeneity: Tau² = 0.57; Cest for overall effect: Z = 1.9   1.6 Corticosteroid plus N3 ahin 2016 ubtotal (95% CI) eterogeneity: Not applicable   | versus "Blind<br>139.29<br>37.22<br>13.75<br>Chi² = 12.16, d<br>90 (P = 0.06)<br>SAID versus H<br>37.3                                    | 20.14<br>3.06<br>13.327<br>f = 2 (P = 0.                       | 20<br>23<br>20<br><b>63</b><br>002); I <sup>2</sup>                 | 35.57<br>7.25<br>= 84%                    | 5.12<br>15.4289 | 23<br>20<br><b>63</b><br>33              | 34.6%<br>33.9%<br><b>100.0</b> %             | 0.38 [-0.20, 0.97]<br>0.44 [-0.19, 1.07]<br>0.91 [-0.03, 1.84]   |                      |
| .1.5 US-Guided Injections hen 2006 ogu 2012 aghighat 2016 ubtotal (95% CI) eterogeneity: Tau² = 0.57; 0 est for overall effect: Z = 1.9 ahin 2016 ubtotal (95% CI) eterogeneity: Not applicable est for overall effect: Z = 1.6   | 139.29<br>37.22<br>13.75<br>Chi² = 12.16, d<br>00 (P = 0.06)<br>SAID versus k<br>37.3   | 20.14<br>3.06<br>13.327<br>f = 2 (P = 0.<br>Kinesiotapi<br>5.8 | 20<br>23<br>20<br><b>63</b><br>002); I <sup>2</sup><br>ng plus      | 35.57<br>7.25<br>= 84%                    | 5.12<br>15.4289 | 23<br>20<br><b>63</b><br>33              | 34.6%<br>33.9%<br><b>100.0%</b>              | 0.38 [-0.20, 0.97]<br>0.44 [-0.19, 1.07]<br>0.91 [-0.03, 1.84]   |                      |
| .1.5 US-Guided Injections hen 2006 ogu 2012 aghighat 2016 ubtotal (95% CI) eterogeneity: Tau² = 0.57; Cest for overall effect: Z = 1.9 .1.6 Corticosteroid plus Nahin 2016 ubtotal (95% CI) eterogeneity: Not applicable est for overall effect: Z = 1.6 .1.7 Corticosteroid plus Nahin 2016 ubtotal (95% CI)   | versus "Blind<br>139.29<br>37.22<br>13.75<br>Chi² = 12.16, d<br>30 (P = 0.06)<br>SAID versus N<br>37.3<br>SAID versus N<br>360 (P = 0.11) | 20.14<br>3.06<br>13.327<br>f = 2 (P = 0.<br>Kinesiotapi<br>5.8 | 20<br>23<br>20<br>63<br>002); l <sup>2</sup><br>ng plus<br>33<br>33 | 35.57<br>7.25<br>= 84%<br>S NSAID<br>34.8 | 5.12<br>15.4289 | 23<br>20<br><b>63</b><br>33<br><b>33</b> | 34.6%<br>33.9%<br>100.0%<br>100.0%           | 0.38 [-0.20, 0.97]<br>0.44 [-0.19, 1.07]<br>0.91 [-0.03, 1.84]<br>0.40 [-0.09, 0.89]<br>0.40 [-0.09, 0.89] |                      |
| .1.5 US-Guided Injections hen 2006 ogu 2012 aghighat 2016 ubtotal (95% CI) eterogeneity: Tau² = 0.57; Cest for overall effect: Z = 1.9 .1.6 Corticosteroid plus NS ahin 2016 ubtotal (95% CI) eterogeneity: Not applicable est for overall effect: Z = 1.6 .1.7 Corticosteroid plus NS ahin 2016  | 139.29<br>37.22<br>13.75<br>Chi² = 12.16, d<br>00 (P = 0.06)<br>SAID versus k<br>37.3   | 20.14<br>3.06<br>13.327<br>f = 2 (P = 0.<br>Kinesiotapi<br>5.8 | 20<br>23<br>20<br>63<br>002); l <sup>2</sup><br>ng plus<br>33<br>33 | 35.57<br>7.25<br>= 84%                    | 5.12<br>15.4289 | 23<br>20<br>63<br>33<br>33               | 34.6%<br>33.9%<br>100.0%<br>100.0%<br>100.0% | 0.38 [-0.20, 0.97]<br>0.44 [-0.19, 1.07]<br>0.91 [-0.03, 1.84]<br>0.40 [-0.09, 0.89]<br>0.40 [-0.09, 0.89] | *                    |
| 1.5 US-Guided Injections hen 2006 ogu 2012 aghighat 2016 ubtotal (95% CI) eterogeneity: Tau² = 0.57; Clest for overall effect: Z = 1.9 1.6 Corticosteroid plus N3 ahin 2016 ubtotal (95% CI) eterogeneity: Not applicable est for overall effect: Z = 1.6 1.7 Corticosteroid plus N3 ahin 2016 ubtotal (95% CI) eterogeneity: Not applicable est for overall effect: Z = 1.6 1.7 Corticosteroid plus N3 ahin 2016 ubtotal (95% CI)                  | versus "Blinc<br>139.29<br>37.22<br>13.75<br>Chi² = 12.16, d<br>20 (P = 0.06)<br>SAID versus k<br>37.3<br>SAID versus k<br>37.3           | 20.14<br>3.06<br>13.327<br>f = 2 (P = 0.<br>Kinesiotapi<br>5.8 | 20<br>23<br>20<br>63<br>002); l <sup>2</sup><br>ng plus<br>33<br>33 | 35.57<br>7.25<br>= 84%<br>S NSAID<br>34.8 | 5.12<br>15.4289 | 23<br>20<br>63<br>33<br>33               | 34.6%<br>33.9%<br>100.0%<br>100.0%           | 0.38 [-0.20, 0.97]<br>0.44 [-0.19, 1.07]<br>0.91 [-0.03, 1.84]<br>0.40 [-0.09, 0.89]<br>0.40 [-0.09, 0.89] |                      |
| .1.5 US-Guided Injections hen 2006 ogu 2012 aghighat 2016 ubtotal (95% CI) eterogeneity: Tau² = 0.57; C est for overall effect: Z = 1.9 1.6 Corticosteroid plus N: ahin 2016 ubtotal (95% CI) eterogeneity: Not applicable est for overall effect: Z = 1.6 1.7 Corticosteroid plus N: ahin 2016 ubtotal (95% CI) eterogeneity: Not applicable ubtotal (95% CI)  | 139.29<br>37.22<br>13.75<br>Chi² = 12.16, di<br>00 (P = 0.06)<br>SAID versus Nation (P = 0.11)<br>SAID versus Nation (P = 0.11)           | 20.14<br>3.06<br>13.327<br>f = 2 (P = 0.<br>Kinesiotapi<br>5.8 | 20<br>23<br>20<br>63<br>002); l <sup>2</sup><br>ng plus<br>33<br>33 | 35.57<br>7.25<br>= 84%<br>S NSAID<br>34.8 | 5.12<br>15.4289 | 23<br>20<br>63<br>33<br>33               | 34.6%<br>33.9%<br>100.0%<br>100.0%<br>100.0% | 0.38 [-0.20, 0.97]<br>0.44 [-0.19, 1.07]<br>0.91 [-0.03, 1.84]<br>0.40 [-0.09, 0.89]<br>0.40 [-0.09, 0.89] |                      |
| 1.5 US-Guided Injections nen 2006 gu 2012 aghighat 2016 ubtotal (95% CI) eterogeneity: Tau² = 0.57; C est for overall effect: Z = 1.9 1.6 Corticosteroid plus N3 ahin 2016 ubtotal (95% CI) eterogeneity: Not applicable est for overall effect: Z = 1.6 1.7 Corticosteroid plus N3 ahin 2016 ubtotal (95% CI)  | 139.29<br>37.22<br>13.75<br>Chi² = 12.16, di<br>00 (P = 0.06)<br>SAID versus Nation (P = 0.11)<br>SAID versus Nation (P = 0.11)           | 20.14<br>3.06<br>13.327<br>f = 2 (P = 0.<br>Kinesiotapi<br>5.8 | 20<br>23<br>20<br>63<br>002); l <sup>2</sup><br>ng plus<br>33<br>33 | 35.57<br>7.25<br>= 84%<br>S NSAID<br>34.8 | 5.12<br>15.4289 | 23<br>20<br>63<br>33<br>33               | 34.6%<br>33.9%<br>100.0%<br>100.0%<br>100.0% | 0.38 [-0.20, 0.97]<br>0.44 [-0.19, 1.07]<br>0.91 [-0.03, 1.84]<br>0.40 [-0.09, 0.89]<br>0.40 [-0.09, 0.89] |                      |
| 1.5 US-Guided Injections nen 2006 agu 2012 aghighat 2016 abtotal (95% CI) eterogeneity: Tau² = 0.57; Cest for overall effect: Z = 1.8 1.6 Corticosteroid plus Nation 2016 abtotal (95% CI) eterogeneity: Not applicable set for overall effect: Z = 1.6 1.7 Corticosteroid plus Nation 2016 abtotal (95% CI) eterogeneity: Not applicable abtotal (95% CI) eterogeneity: Not applicable abtotal (95% CI)  | 139.29<br>37.22<br>13.75<br>Chi² = 12.16, di<br>00 (P = 0.06)<br>SAID versus Nation (P = 0.11)<br>SAID versus Nation (P = 0.11)           | 20.14<br>3.06<br>13.327<br>f = 2 (P = 0.<br>Kinesiotapi<br>5.8 | 20<br>23<br>20<br>63<br>002); l <sup>2</sup><br>ng plus<br>33<br>33 | 35.57<br>7.25<br>= 84%<br>S NSAID<br>34.8 | 5.12<br>15.4289 | 23<br>20<br>63<br>33<br>33               | 34.6%<br>33.9%<br>100.0%<br>100.0%<br>100.0% | 0.38 [-0.20, 0.97]<br>0.44 [-0.19, 1.07]<br>0.91 [-0.03, 1.84]<br>0.40 [-0.09, 0.89]<br>0.40 [-0.09, 0.89] |                      |
| I.5 US-Guided Injections ten 2006 ten 2006 ten 2012 ghighat 2016 tetrogeneity: Tau² = 0.57; 0 st for overall effect: Z = 1.8 I.6 Corticosteroid plus Notatotal (95% CI) teterogeneity: Not applicable st for overall effect: Z = 1.6 I.7 Corticosteroid plus Notatotal (95% CI) teterogeneity: Not applicable st for overall effect: Z = 1.6 I.7 Corticosteroid plus Notatotal (95% CI) teterogeneity: Not applicable teterogeneity: Not applicable | 139.29<br>37.22<br>13.75<br>Chi² = 12.16, di<br>00 (P = 0.06)<br>SAID versus Nation (P = 0.11)<br>SAID versus Nation (P = 0.11)           | 20.14<br>3.06<br>13.327<br>f = 2 (P = 0.<br>Kinesiotapi<br>5.8 | 20<br>23<br>20<br>63<br>002); l <sup>2</sup><br>ng plus<br>33<br>33 | 35.57<br>7.25<br>= 84%<br>S NSAID<br>34.8 | 5.12<br>15.4289 | 23<br>20<br>63<br>33<br>33               | 34.6%<br>33.9%<br>100.0%<br>100.0%<br>100.0% | 0.38 [-0.20, 0.97]<br>0.44 [-0.19, 1.07]<br>0.91 [-0.03, 1.84]<br>0.40 [-0.09, 0.89]<br>0.40 [-0.09, 0.89] |                      |

Figure Appendix-4c 2. Steroids: Outcome AROM at the shortest follow-up

| rr  | Experi      | mental    |                   | . <i></i> C         | ontrol  | -               |                          | Std. Mean Difference                             | Std. Mean Difference                 |
|---|-------------|-----------|-------------------|---------------------|---------|-----------------|--------------------------|--|--------------------------------------|
| Study or Subgroup   | Mean        | SD        | Total             | Mean                | SD      | Total           | Weight                   | IV, Random, 95% CI                               | IV, Random, 95% CI                   |
| 2.1.1 Celecoxib 200 mg vers   | sus Placebo | )         |                   |                     |         |                 |                          |  |                                      |
| Petri 2004<br>Subtotal (95% CI)   | 27.29       | 2.88      | 98<br><b>98</b>   | 19.75               | 2.85    |                 | 100.0%<br><b>100.0</b> % | 2.62 [2.25, 3.00]<br><b>2.62 [2.25, 3.00</b> ]   |                                      |
| Heterogeneity: Not applicable<br>Test for overall effect: Z = 13              |             | 0001)     |                   |                     |         |                 |                          |  |                                      |
| 2.1.2 Naproxen 500 mg vers  | sus Placebo | )         |                   |                     |         |                 |                          |  |                                      |
| Petri 2004<br>Subtotal (95% CI)   | 29.49       | 3.41      | 100<br><b>100</b> | 19.75               | 2.85    |                 | 100.0%<br><b>100.0%</b>  | 3.10 [2.69, 3.50]<br><b>3.10 [2.69, 3.50</b> ]   |                                      |
| Heterogeneity: Not applicable<br>Test for overall effect: Z = 14              |             | 0001)     |                   |                     |         |                 |                          |  |                                      |
| 2.1.3 Topical Glyceryl Trinit   | trate Patch | versus P  | lacebo            | Patch               |         |                 |                          |  |                                      |
| Paoloni 2005 1<br>Subtotal (95% CI)   | 46.666667   | 24.2548   | 23<br><b>23</b>   | 127.8161            | 39.0805 |                 | 100.0%<br><b>100.0</b> % | 0.56 [-0.01, 1.14]<br><b>0.56 [-0.01, 1.14</b> ] |                                      |
| Heterogeneity: Not applicable Test for overall effect: Z = 1.9                |             |           |                   |                     |         |                 |                          |  |                                      |
| 2.1.4 Local Anaesthetic ver   | sus Cortico | steroids  |                   |                     |         |                 |                          |  |                                      |
| Alvarez 2005  | 143.7       | 27.8      | 28                | 139                 | 21.8    | 30              | 39.6%                    | 0.19 [-0.33, 0.70]                               | <del> </del> -                       |
| Alvarez-Nemegyei 2008   | 139         | 23        | 17                | 137                 | 18      | 15              | 21.9%                    | 0.09 [-0.60, 0.79]                               |                                      |
| Celik 2009 Cortico<br>Subtotal (95% CI)                                       | 178.7       | 6.3       | 28<br><b>73</b>   | 178.4               | 4.3     | 28<br><b>73</b> | 38.5%<br><b>100.0</b> %  | 0.05 [-0.47, 0.58]<br><b>0.12 [-0.21, 0.44</b> ] | •                                    |
| Heterogeneity: Tau <sup>2</sup> = 0.00; C<br>Test for overall effect: Z = 0.7 |             | ,         | = 0.94);          | I <sup>2</sup> = 0% |         |                 |                          |  |                                      |
| 2.1.5 Local Anaesthetic Pat   | ch versus C | Corticost | eroid             |                     |         |                 |                          |  |                                      |
| Radnovich 2014<br>Subtotal (95% CI)   | 127.1688    | 28.987    | 29<br><b>29</b>   | 122.4935            | 45.3507 |                 | 100.0%<br><b>100.0</b> % | 0.12 [-0.39, 0.63]<br><b>0.12 [-0.39, 0.63</b> ] | <u> </u>                             |
| Heterogeneity: Not applicable Test for overall effect: Z = 0.4                |             |           | 29                |                     |         | JI              | 100.070                  | 0.12 [-0.39, 0.03]                               |                                      |
| 2.1.6 Diclofenac versus Pla   | , ,         |           |                   |                     |         |                 |                          |  |                                      |
| Adebajo 1990  |             | 25.2228   | 20                | 5.4                 | 46.8233 | 20              | 100.0%                   | 1.08 [0.41, 1.75]                                |                                      |
| Subtotal (95% CI)   |             | 23.2220   | 20                | 3.4                 | +0.0233 |                 | 100.0%                   | 1.08 [0.41, 1.75]                                |                                      |
| Heterogeneity: Not applicable Test for overall effect: Z = 3.1                |             | 2)        |                   |                     |         |                 |                          |  |                                      |
|   |             |           |                   |                     |         |                 |                          |  |                                      |
|   |             |           |                   |                     |         |                 |                          |  | -2 -1 0 1 2                          |
|   |             |           |                   |                     |         |                 |                          |  | Favours Control Favours Experimental |

Figure Appendix-4c 3. Medications, and anaesthetic patch: Outcome AROM at the longest follow-up

| rippendix te i ore  |              | rimental   |                   | _                        | ontrol  |                 | ;                        | Std. Mean Difference                                     | Std. Mean Difference               |
|---|--------------|------------|-------------------|--------------------------|---------|-----------------|--------------------------|--|------------------------------------|
| Study or Subgroup   | Mean         | SD         | Total             | Mean                     | SD      | Total           | Weight                   | IV, Random, 95% CI                                       | IV, Random, 95% CI                 |
| 2.1.1 Celecoxib 200 mg ve   | rsus Place   | bo         |                   |                          |         |                 |                          |  |                                    |
| Petri 2004<br>Subtotal (95% CI)   | 27.29        | 2.88       | 98<br><b>98</b>   | 19.75                    | 2.85    |                 | 100.0%<br><b>100.0</b> % | 2.62 [2.25, 3.00]<br><b>2.62 [2.25, 3.00]</b>            |                                    |
| Heterogeneity: Not applicab   | ole          |            |                   |                          |         |                 |                          |  |                                    |
| Test for overall effect: Z = 1  |              | .00001)    |                   |                          |         |                 |                          |  |                                    |
| 2.1.2 Naproxen 500 mg ve  |              |            |                   |                          |         |                 |                          |  | _                                  |
| Petri 2004<br>Subtotal (95% CI)   | 29.49        | 3.41       | 100<br><b>100</b> | 19.75                    | 2.85    |                 | 100.0%<br><b>100.0</b> % | 3.10 [2.69, 3.50]<br><b>3.10 [2.69</b> , <b>3.50]</b>    | -                                  |
| Heterogeneity: Not applicable Test for overall effect: Z = 1              |              | .00001)    |                   |                          |         |                 |                          |  |                                    |
| 2.1.3 Topical Glyceryl Trin   | nitrate Patc | h versus   | Placek            | oo Patch                 |         |                 |                          |  |                                    |
| Paoloni 2005<br>Subtotal (95% CI)   | 129.655      |            |                   | 122.7586                 | 21.5013 |                 | 100.0%<br><b>100.0%</b>  | 0.32 [-0.23, 0.88]<br><b>0.32 [-0.23</b> , <b>0.88</b> ] |                                    |
| Heterogeneity: Not applicable Test for overall effect: Z = 1              |              | 25)        |                   |                          |         |                 |                          |  |                                    |
| 2.1.4 Local Anaesthetic ve  | ersus Corti  | costeroid  | ls                |                          |         |                 |                          |  |                                    |
| Alvarez 2005  | 133.3        | 25.4       | 28                | 148.8                    | 17.6    | 30              | 36.5%                    | -0.70 [-1.24, -0.17]                                     | <del></del>                        |
| Alvarez-Nemegyei 2008   | 134          | 27         | 17                | 130                      | 24      | 15              | 27.0%                    | 0.15 [-0.54, 0.85]                                       | <del>- -</del>                     |
| Celik 2009 Cortico<br>Subtotal (95% CI)                                   | 167.6        | 10.5       | 28<br><b>73</b>   | 172.8                    | 12.2    | 28<br><b>73</b> | 36.5%<br><b>100.0</b> %  | -0.45 [-0.98, 0.08]<br><b>-0.38 [-0.84, 0.08]</b>        | •                                  |
| Heterogeneity: Tau <sup>2</sup> = 0.07;<br>Test for overall effect: Z = 1 |              |            | P = 0.16          | 6); I <sup>2</sup> = 46% | •       |                 |                          |  |                                    |
| 2.1.5 Local Anaesthetic Pa  | atch versus  | s Corticos | steroid           |                          |         |                 |                          |  |                                    |
|   | 127.6364     | 28.987     | 29                | 122.4935                 | 42.5454 | 31              | 100.0%                   | 0.14 [-0.37, 0.65]                                       | -                                  |
| Subtotal (95% CI)   |              |            | 29                |                          |         | 31              | 100.0%                   | 0.14 [-0.37, 0.65]                                       | <b>~</b>                           |
| Heterogeneity: Not applicable Test for overall effect: Z = 0              |              | (9)        |                   |                          |         |                 |                          |  |                                    |
| 2.1.6 Diclofenac versus Pl  | `            | -,         |                   |                          |         |                 |                          |  |                                    |
| Adebajo 1990  |              | 25 2220    | 20                | 5 A                      | 46.8233 | 20              | 100.0%                   | 1 00 [0 41 1 75]   |                                    |
| Subtotal (95% CI)   |              | 25.2228    | 20<br><b>20</b>   | 5.4                      | 40.8∠33 |                 | 100.0%                   | 1.08 [0.41, 1.75]<br>1.08 [0.41, 1.75]                   | -                                  |
| Heterogeneity: Not applicable Test for overall effect: Z = 3              |              | 002)       |                   |                          |         |                 |                          |  |                                    |
|   |              |            |                   |                          |         |                 |                          | _  |                                    |
|   |              |            |                   |                          |         |                 |                          |  | -2 -1 0 1 2                        |
|   |              |            |                   |                          |         |                 |                          |  | Favours Control Favours Medication |

Figure Appendix-4c 4. Medications, and anaesthetic patch: Outcome AROM at the shortest follow-up

|   | Mean                              | ercise            | Total           | Mean                 | Control<br>SD           | Total    | Weight                   | Std. Mean Difference<br>IV, Random, 95% CI | Std. Mean D<br>IV, Randor |
|---|-----------------------------------|-------------------|-----------------|----------------------|-------------------------|----------|--------------------------|--|---------------------------|
| y or Subgroup  Exercise versus  |                                   | 30                | TOTAL           | mean                 | 30                      | i Jiai   | TTOIGHT                  | , italiaoili, 55/6 Ol                      | IV, Raildoi               |
| ingwe 2008  | 27.6                              | 41.7              | 8               | 42.6                 | 15.8                    | 7        | 31.6%                    | -0.44 [-1.47, 0.60]                        |                           |
| pardi 2008  | 136.9                             | 28.5              | 30              | 127.2                | 31.6                    | 30       |                          | 0.32 [-0.19, 0.83]                         | +                         |
| total (95% CI)  |                                   |                   | 38              |                      |                         | 37       | 100.0%                   | 0.08 [-0.61, 0.77]                         |                           |
| rogeneity: Tau² = 0   |                                   |                   | f = 1 (P        | = 0.20);             | $I^2 = 39\%$            |          |                          |  |                           |
| for overall effect: 2   | ' = 0.23 (F                       | · = 0.82)         |                 |                      |                         |          |                          |  |                           |
| Exercise versus   | Passive I                         | Physical          | Therap          | oy (US, <sup>.</sup> | Tens, Elec              | ctro, et | c.)                      |  |                           |
| r 2015  | 174                               | 9                 | 11              | 173                  | 8                       | 8        |                          | 0.11 [-0.80, 1.02]                         | <del> </del> 1            |
| 2011  | 32.1                              | 16.9              | 17              | 6.4                  | 8.5                     | 18       |                          |  |                           |
| zy 2014   | 28.78                             | 19.8              | 33              | 19.14                | 14.42                   | 35       | 29.4%                    | 0.55 [0.07, 1.04]                          | -                         |
| 2013  | 8.33                              | 3.56              | 15              | 3.36                 | 2.89                    | 15       |                          | 1.49 [0.67, 2.31]                          |                           |
| total (95% CI)  | 2.44. 01:12                       | 40.50             | 76              | B 0.00               | 0): 12 - 70             |          | 100.0%                   | 1.00 [0.25, 1.76]                          |                           |
| rogeneity: Tau <sup>2</sup> = 0<br>for overall effect: 2  |                                   |                   |                 | P = 0.00             | 6); I <sup>2</sup> = 76 | %        |                          |  |                           |
| ioi overali ellect. 2   | . – 2.00 (1                       | - 0.003           | ,               |                      |                         |          |                          |  |                           |
| Exercise versus   |                                   |                   |                 |                      |                         |          |                          |  |                           |
| nr 2006   |                                   | 10.3184           | 40              |                      | 11.1055                 | 39       |                          | 0.31 [-0.13, 0.76]                         | Ť                         |
| smayer 2010   | 136.3                             | 46.577            | 51<br>91        | 134.1                | 42.0256                 | 52<br>91 |                          | 0.05 [-0.34, 0.44]                         |                           |
| total (95% CI)  | ) 00: Ch:2                        | -070 -            | 91<br>If = 1 /D | - 0.30               | 12 - 00/                | 91       | 100.0%                   | 0.16 [-0.13, 0.45]                         | <b>1</b>                  |
| rogeneity: Tau <sup>2</sup> = 0<br>for overall effect: 2  |                                   |                   | 1 = 1 (P        | - 0.38);             | 1" = 0%                 |          |                          |  |                           |
| ioi overali ellect. 2   | 1.10 (F                           | - 0.21)           |                 |                      |                         |          |                          |  |                           |
| Specific versus   |                                   |                   |                 |                      |                         |          |                          |  |                           |
| idreuil 2013  | 7.5                               | 2.1424            | 30              | 6.1                  | 2.4963                  |          | 100.0%                   |  | -                         |
| otal (95% CI)   | P 1- 1                            |                   | 30              |                      |                         | 32       | 100.0%                   | 0.59 [0.08, 1.10]                          | [                         |
| rogeneity: Not app<br>for overall effect: 2   |                                   | 5 = 0.037         |                 |                      |                         |          |                          |  |                           |
| ioi overali ellect: 2   | . – 2.20 (F                       | - 0.02)           |                 |                      |                         |          |                          |  |                           |
| Traditional plus  | Eccentric                         | Exercis           | e versı         | us Tradi             | tional Exe              | ercise   |                          |  | 1                         |
| ie 2015   | 146.2                             | 23                | 18              | 143.8                | 30.4                    |          | 100.0%                   | 0.09 [-0.59, 0.76]                         | <del></del>               |
| otal (95% CI)   |                                   |                   | 18              |                      |                         | 16       | 100.0%                   | 0.09 [-0.59, 0.76]                         |                           |
| rogeneity: Not app  |                                   | ) - 0 00°         |                 |                      |                         |          |                          |  |                           |
| for overall effect: 2   | . = 0.26 (F                       | · = 0.80)         |                 |                      |                         |          |                          |  |                           |
| Supervised vers   | us Home                           | -Based E          | ercis           | es                   |                         |          |                          |  |                           |
| viken 2015  | 121                               | 42                | 23              | 128                  | 42                      | 21       | 100.0%                   | -0.16 [-0.76, 0.43]                        | <del></del>               |
| otal (95% CI)   |                                   |                   | 23              |                      |                         | 21       | 100.0%                   |  |                           |
| rogeneity: Not app  |                                   |                   |                 |                      |                         |          |                          |  |                           |
| for overall effect: 2   | . = 0.54 (F                       | ' = 0.59)         |                 |                      |                         |          |                          |  |                           |
| Physiotherapy (   | TENS plu                          | s HOT Pa          | ack plu         | s Exerc              | ise) plus               | Propri   | oception                 | versus Physiotherapy (TENS plus HOT        | Pack plus Exercise)       |
| 2015  | 180                               | 7.41              | 31              | 180                  | 5.19                    |          | 100.0%                   |  | <del></del>               |
| otal (95% CI)   |                                   |                   | 31              |                      |                         | 30       | 100.0%                   | 0.00 [-0.50, 0.50]                         | •                         |
| rogeneity: Not app  |                                   |                   |                 |                      |                         |          |                          |  |                           |
| for overall effect: 2   | i = 0.00 (F                       | · = 1.00)         |                 |                      |                         |          |                          |  |                           |
| Scapular oriente  | d motor o                         | control v         | ersus (         | classic e            | exercise a              | nd ma    | nual the                 | гару                                       |                           |
| urt 2011  | 179.75                            | 11.11             | 20              | 177                  | 13.4                    |          | 100.0%                   | 0.22 [-0.40, 0.84]                         | <del> </del>              |
| otal (95% CI)   |                                   |                   | 20              |                      |                         | 20       | 100.0%                   | 0.22 [-0.40, 0.84]                         | <b>~</b>                  |
| rogeneity: Not app  |                                   |                   |                 |                      |                         |          |                          |  |                           |
| for overall effect: 2   | : = 0.69 (F                       | ' = 0.49)         |                 |                      |                         |          |                          |  |                           |
| Home-Based Ex   | ercises v                         | ersus Oc          | cupati          | onal The             | erapy                   |          |                          |  |                           |
| hak 2013  | 28                                | 39.4              | 16              | 23.9                 | 43.9                    | 22       | 100.0%                   | 0.10 [-0.55, 0.74]                         | <del></del>               |
| otal (95% CI)   |                                   |                   | 16              |                      |                         |          | 100.0%                   |  | <b>-</b>                  |
| rogeneity: Not app  |                                   |                   |                 |                      |                         |          |                          |  |                           |
| for overall effect: 2   | ' = 0.29 (F                       | ° = 0.77)         |                 |                      |                         |          |                          |  |                           |
| 0 Motor Imagery   | plus Exer                         | cise ver          | sus Ex          | ercise               |                         |          |                          |  |                           |
| o.o. iiiiugely  | 178                               | 2.933             | 8               | 177                  | 2.723                   | 8        | 100.0%                   | 0.33 [-0.65, 1.32]                         |                           |
| ek 2014   | .,,                               | 500               | 8               |                      | , _0                    |          | 100.0%                   |  |                           |
| ek 2014<br>total (95% CI)   | licable                           |                   |                 |                      |                         |          |                          |  |                           |
|   | licable                           | 2 = 0.51)         |                 |                      |                         |          |                          |  |                           |
| otal (95% CI)   |                                   | 0.01)             |                 |                      |                         |          |                          |  |                           |
| otal (95% CI)<br>rogeneity: Not app<br>for overall effect: 2  | Z = 0.66 (F                       | ,                 | . Dans          | 1 1/1/6 -1/1-        |                         |          |                          |  |                           |
| otal (95% CI) rogeneity: Not app for overall effect: 2  1 Clinical Based  | Z = 0.66 (F<br>versus W           | orkplace          |                 |                      | _                       | 10       | 100.00/                  | 0.221.063.0491                             |                           |
| total (95% CI) rogeneity: Not app<br>for overall effect: 2<br>1 Clinical Based<br>ng 2007                       | Z = 0.66 (F                       | ,                 | 48              | 165.65               | ardening<br>9.92        |          | 100.0%<br><b>100.0</b> % |  |                           |
| total (95% CI) rogeneity: Not app for overall effect: 2 1 Clinical Based ag 2007 total (95% CI)                 | Z = 0.66 (F<br>versus W<br>163.23 | orkplace          |                 |                      | _                       |          | 100.0%<br><b>100.0</b> % |  | -                         |
| total (95% CI) rogeneity: Not app<br>for overall effect: 2<br>1 Clinical Based<br>ng 2007                       | Z = 0.66 (F<br>versus W<br>163.23 | orkplace<br>11.69 | 48<br><b>48</b> |                      | _                       |          |                          |  |                           |
| otal (95% CI) rogeneity: Not app for overall effect: 2 1 Clinical Based g 2007 otal (95% CI) rogeneity: Not app | Z = 0.66 (F<br>versus W<br>163.23 | orkplace<br>11.69 | 48<br><b>48</b> |                      | _                       |          |                          |  |                           |

Figure Appendix-4c 5. Exercise: Outcome AROM at the longest follow-up

| udy or Subgroup                                   | Mean      | ercise<br>SD 1       | Γotal           | Mean           | Control<br>SD            | Total           | Weight                   | Std. Mean Difference<br>IV, Random, 95% CI |                                    | IV, Random, 95% CI |
|---|-----------|----------------------|-----------------|----------------|--------------------------|-----------------|--------------------------|--|------------------------------------|--------------------|
| I.1 Exercise versus r                             | othing    |                      |                 |                |                          |                 |                          |  |                                    |                    |
| chingwe 2008                                      | 27.6      | 41.7                 | 8               | 42.6           | 15.8                     | 7               | 31.6%                    | -0.44 [-1.47, 0.60]                        |                                    |                    |
| mbardi 2008                                       | 136.9     | 28.5                 | 30              | 127.2          | 31.6                     | 30              | 68.4%                    | 0.32 [-0.19, 0.83]                         |                                    |                    |
| btotal (95% CI)                                   |           |                      | 38              |                |                          | 37              | 100.0%                   | 0.08 [-0.61, 0.77]                         |                                    |                    |
| terogeneity: Tau² = 0.                            |           |                      | f = 1 (F        | P = 0.20       | ); I <sup>2</sup> = 39%  |                 |                          |  |                                    |                    |
| st for overall effect: Z                          | = 0.23 (F | P = 0.82)            |                 |                |                          |                 |                          |  |                                    |                    |
| .2 Exercise versus p                              | assive    | ohysical             | therap          | y (us, t       | ens, electr              | o, etc          | .)                       |  |                                    |                    |
| ar 2015   | 171       | 8                    | 20              | 173            | 10                       | 20              | 25.8%                    | -0.22 [-0.84, 0.41]                        |                                    |                    |
| e 2011  | 32.1      | 16.9                 | 17              | 6.4            | 8.5                      | 18              | 23.6%                    | 1.89 [1.08, 2.71]                          |                                    |                    |
| ezy 2014  | 28.78     | 19.8                 | 33              | 19.14          | 14.42                    | 35              | 27.2%                    | 0.55 [0.07, 1.04]                          |                                    | <del></del>        |
| k 2013  | 8.33      | 3.56                 | 15              | 3.36           | 2.89                     | 15              | 23.5%                    | 1.49 [0.67, 2.31]                          |                                    |                    |
| ototal (95% CI)                                   |           |                      | 85              |                |                          | 88              | 100.0%                   | 0.89 [0.02, 1.76]                          |                                    |                    |
| erogeneity: Tau² = 0.<br>it for overall effect: Z |           |                      | df = 3 (        | (P = 0.00      | 001); I <sup>2</sup> = 8 | 5%              |                          |  |                                    |                    |
| 2 Evereine vereue e                               |           | ,                    |                 |                |                          |                 |                          |  |                                    |                    |
| 3 Exercise versus s                               |           | 0.740                | 40              |                | 10 7710                  |                 | 45 50/                   | 0.001.000.001                              |                                    | <u> </u>           |
| ahr 2006  |           | 9.748                | 43              |                | 10.7718                  | 41              | 45.5%                    | 0.38 [-0.06, 0.81]                         |                                    |                    |
| osmayer 2010<br>ototal (95% CI)                   | 136.3     | 46.577               | 51<br><b>94</b> | 134.1          | 42.0256                  | 52<br><b>93</b> | 54.5%<br><b>100.0</b> %  | 0.05 [-0.34, 0.44]<br>0.20 [-0.12, 0.52]   |                                    |                    |
|   | 04. Obi2  | _ 4 00 -4            |                 | 0 07           | . 12 - 400/              | 93              | 100.076                  | 0.20 [-0.12, 0.32]                         |                                    |                    |
| erogeneity: Tau² = 0.<br>it for overall effect: Z |           |                      | I – I (F        | - 0.27         | ), 1 10%                 |                 |                          |  |                                    |                    |
| 4 Specific versus n                               | on-snec   | ific ever            | cises           |                |                          |                 |                          |  |                                    |                    |
| audreuil 2011                                     | -         | 1116 exerc<br>2.1424 | 30              | 6.1            | 2.4963                   | 30              | 100.0%                   | 0.59 [0.08, 1.10]                          |                                    |                    |
| ototal (95% CI)                                   | 1.5       | ۷. ۱۹۷4              | 30<br>30        | 0.1            | 2.4303                   |                 | 100.0%                   | 0.59 [0.08, 1.10]                          |                                    |                    |
| erogeneity: Not appli                             | cable     |                      |                 |                |                          |                 |                          | [5.00,0]                                   |                                    |                    |
| st for overall effect: Z                          |           | P = 0.02)            |                 |                |                          |                 |                          |  |                                    |                    |
|   | ,         | ,                    |                 |                |                          |                 |                          |  |                                    |                    |
| 5 Traditional plus E                              |           |                      |                 |                |                          |                 |                          |  |                                    | <u>L</u>           |
| me 2015   | 146.2     | 23                   | 18              | 143.8          | 30.4                     |                 | 100.0%                   | 0.09 [-0.59, 0.76]                         |                                    |                    |
| ototal (95% CI)                                   |           |                      | 18              |                |                          | 16              | 100.0%                   | 0.09 [-0.59, 0.76]                         |                                    |                    |
| erogeneity: Not appli                             |           |                      |                 |                |                          |                 |                          |  |                                    |                    |
| st for overall effect: Z                          | = 0.26 (F | P = 0.80             |                 |                |                          |                 |                          |  |                                    |                    |
| .6 Supervised versu                               | s Home    | -Based E             | xercis          | es             |                          |                 |                          |  |                                    |                    |
| nviken 2015                                       | 21        | 18                   | 21              | 24             | 24                       | 18              | 100.0%                   | -0.14 [-0.77, 0.49]                        |                                    |                    |
| btotal (95% CI)                                   |           |                      | 21              |                |                          |                 | 100.0%                   | -0.14 [-0.77, 0.49]                        |                                    |                    |
| terogeneity: Not appli                            | cable     |                      |                 |                |                          |                 |                          |  |                                    |                    |
| st for overall effect: Z                          | = 0.44 (F | P = 0.66             |                 |                |                          |                 |                          |  |                                    |                    |
| .7 Physiotherapy (T                               | ENS plu   | s HOT Pa             | ack plu         | ıs Exerc       | cise) plus               | Propri          | oception                 | versus Physiotherapy                       | (TENS plus HOT Pack plus Exercise) |                    |
| ek 2015   | 180       | 7.41                 | 31              | 180            | 11.11                    | 30              | 100.0%                   | 0.00 [-0.50, 0.50]                         |                                    | <del>-</del>       |
| btotal (95% CI)                                   |           |                      | 31              |                |                          | 30              | 100.0%                   | 0.00 [-0.50, 0.50]                         |                                    |                    |
| terogeneity: Not appli                            | cable     |                      |                 |                |                          |                 |                          |  |                                    |                    |
| t for overall effect: Z                           |           | P = 1.00)            |                 |                |                          |                 |                          |  |                                    |                    |
| 8 Scapular oriented                               | motor     | control v            | ersus           | classic        | exercise a               | ınd m           | anual the                | ару  |                                    |                    |
|   | 179.75    | 11.11                | 20              | 177            | 13.4                     |                 | 100.0%                   | 0.22 [-0.40, 0.84]                         |                                    | <del></del>        |
| ototal (95% CI)                                   |           |                      | 20              |                |                          |                 | 100.0%                   | 0.22 [-0.40, 0.84]                         |                                    |                    |
| terogeneity: Not appli                            | cable     |                      |                 |                |                          |                 |                          |  |                                    |                    |
| t for overall effect: Z                           | = 0.69 (F | P = 0.49)            |                 |                |                          |                 |                          |  |                                    |                    |
| 9 Home-based exer                                 | cises ve  | ersus occ            | cupatio         | onal the       | rapy                     |                 |                          |  |                                    |                    |
| chak 2013   |           | 39.4                 | ٠. ـ            |                |                          | 22              | 100.0%                   | 0.10 [-0.55, 0.74]                         |                                    |                    |
| ototal (95% CI)                                   | 28        | 55.4                 | 16<br><b>16</b> | 23.9           | 43.9                     |                 | 100.0%                   | 0.10 [-0.55, 0.74]                         |                                    |                    |
| terogeneity: Not appli                            | cable     |                      |                 |                |                          |                 | / 0                      | 2 [ 0.00, 0.14]                            |                                    |                    |
| erogeneity: Not appli<br>it for overall effect: Z |           | P = 0.77)            |                 |                |                          |                 |                          |  |                                    |                    |
| 10 Motor Imagery p                                | ,         |                      | oue E           | orolos         |                          |                 |                          |  |                                    |                    |
| rek 2014  |           | 2.933                | sus Ex<br>8     | tercise<br>177 | 2.723                    | Я               | 100.0%                   | 0.33 [-0.65, 1.32]                         |                                    |                    |
| ototal (95% CI)                                   | 170       | 2.333                | 8               | 1//            | 2.123                    |                 | 100.0%                   | 0.33 [-0.65, 1.32]                         |                                    |                    |
| erogeneity: Not appli                             | cable     |                      | •               |                |                          | •               |                          |  |                                    |                    |
| erogeneity. Not appli<br>it for overall effect: Z |           | P = 0.51)            |                 |                |                          |                 |                          |  |                                    |                    |
|   |           |                      | la a · ·        |                |                          |                 |                          |  |                                    |                    |
| 11 Clinical Based v                               |           |                      |                 |                | _                        | 40              | 100.09/                  | 0 22 1 0 22 0 423                          |                                    |                    |
| eng 2007<br>ototal (95% CI)                       | 163.23    | 11.69                | 48<br><b>48</b> | 165.65         | 9.92                     |                 | 100.0%<br><b>100.0</b> % | -0.22 [-0.63, 0.18]<br>-0.22 [-0.63, 0.18] |                                    |                    |
| , ,   | ooble     |                      | -+0             |                |                          | 40              | 100.070                  | -v.zz [-v.v3, v.10]                        |                                    |                    |
| erogeneity: Not appli<br>it for overall effect: Z |           | 5 = 0.307            |                 |                |                          |                 |                          |  |                                    |                    |
| Lioi overall ellect. Z                            | - 1.07 (1 | - 0.29)              |                 |                |                          |                 |                          |  |                                    |                    |
|   |           |                      |                 |                |                          |                 |                          |  |                                    |                    |
|   |           |                      |                 |                |                          |                 |                          |  | -2                                 | -1 0 1             |

Figure Appendix-4c 6. Exercise: Outcome AROM at the shortest follow-up

| study or Subgroup  1.1.1 Manual Therapy verification 2008  1.1.2 Manual Therapy verification 2015  Sumaraes 2016  Subtotal (95% CI)  Subtotal (95% CI) | 57.1667 : 173   | 27.4999<br>8<br>41.0473<br>20.44, df = 2<br>10.87)<br>ise versus<br>40.8187<br>10.00001)<br>bervised E<br>8 | 8<br>14<br>52<br>2 (P = 0<br>5 Natur<br>42<br>42                | 0.80); I <sup>2</sup> = 0<br>ropathic C:<br>47.46                | 26.6065<br>8<br>40.7087<br>%<br>are (Diet, A<br>30.8038 | 30<br>12<br>13<br><b>55</b><br>Acupu<br>43 | 56.6% 18.0% 25.4% 100.0%                          | 0.05 [-0.46, 0.56]<br>0.24 [-0.66, 1.14]<br>-0.15 [-0.91, 0.60]<br>0.03 [-0.35, 0.41]<br>-1.28 [-1.75, -0.81]<br>-1.28 [-1.75, -0.81] | IV, Random, 95% CI |
|---|---|---|---|--|---|--|---|---|--------------------|
| tkinson 2008  ytar 2015  uimaraes 2016  ubtotal (95% CI)  eterogeneity: Tau² = 0.0  est for overall effect: Z =  1.2 Manual Therapy pl  zczurko 2009  ubtotal (95% CI)  eterogeneity: Not applic  est for overall effect: Z =  1.3 Manual Therapy ve  ytar 2015  ubtotal (95% CI)  eterogeneity: Not applic  est for overall effect: Z =  1.4 Manual Therapy pl  1.4 Manual Therapy pl  | 57.1667 : 173   | 27.4999<br>8<br>41.0473<br>20.44, df = 2<br>0.87)<br>ise versus<br>40.8187<br>2.0.00001)<br>bervised E<br>8 | 8<br>14<br>52<br>2 (P = 0<br>5 Natur<br>42<br>42<br>xercis<br>8 | 171<br>15.4<br>0.80); I <sup>2</sup> = 0<br>ropathic C:<br>47.46 | 8<br>40.7087<br>%<br>are (Diet, A<br>30.8038            | 12<br>13<br><b>55</b><br>Acupu<br>43       | 18.0%<br>25.4%<br>100.0%<br>ncture, etc<br>100.0% | 0.24 [-0.66, 1.14]<br>-0.15 [-0.91, 0.60]<br>0.03 [-0.35, 0.41]   | *                  |
| ytar 2015 uimaraes 2016 ubtotal (95% CI) eterogeneity: Tau² = 0.0 est for overall effect: Z =  1.2 Manual Therapy pl zczurko 2009 ubtotal (95% CI) eterogeneity: Not applica est for overall effect: Z =  1.3 Manual Therapy ve ytar 2015 ubtotal (95% CI) eterogeneity: Not applica est for overall effect: Z =  1.4 Manual Therapy pl  1.4 Manual Therapy pl  | 173<br>8.9<br>10; Chi² = 0<br>0.16 (P =<br>us Exerci<br>0.89<br>able<br>5.35 (P <<br>ersus Sup<br>173<br>able<br>0.24 (P =<br>us Exerci   | 8<br>41.0473<br>0.44, df = 2<br>0.87)<br>ise versus<br>40.8187<br>0.000001)<br>pervised E                   | 8<br>14<br>52<br>2 (P = 0<br>5 Natur<br>42<br>42<br>xercis<br>8 | 171<br>15.4<br>0.80); I <sup>2</sup> = 0<br>ropathic C:<br>47.46 | 8<br>40.7087<br>%<br>are (Diet, A<br>30.8038            | 12<br>13<br><b>55</b><br>Acupu<br>43       | 18.0%<br>25.4%<br>100.0%<br>ncture, etc<br>100.0% | 0.24 [-0.66, 1.14]<br>-0.15 [-0.91, 0.60]<br>0.03 [-0.35, 0.41]   |                    |
| uimaraes 2016 ubtotal (95% CI) eterogeneity: Tau² = 0.0 est for overall effect: Z = .1.2 Manual Therapy pl zczurko 2009 ubtotal (95% CI) eterogeneity: Not applice est for overall effect: Z = .1.3 Manual Therapy ve ytar 2015 ubtotal (95% CI) eterogeneity: Not applice est for overall effect: Z = .1.4 Manual Therapy pl   | 8.9 · · · · · · · · · · · · · · · · · · ·   | 41.0473 0.44, df = 2 0.87) ise versus 40.8187 c.0.00001) bervised E   | 14<br>52<br>2 (P = 0<br>5 Natur<br>42<br>42<br>xercis<br>8      | 15.4<br>0.80); I <sup>2</sup> = 0<br>ropathic C:<br>47.46        | 40.7087<br>%<br>are (Diet, A<br>30.8038                 | 13<br><b>55</b><br>Acupu<br>43             | 25.4%<br>100.0%<br>ncture, etc<br>100.0%          | -0.15 [-0.91, 0.60]<br>0.03 [-0.35, 0.41]<br>s)<br>-1.28 [-1.75, -0.81]   |                    |
| subtotal (95% CI) leterogeneity: Tau² = 0.0 est for overall effect: Z = .1.2 Manual Therapy pl szczurko 2009 subtotal (95% CI) leterogeneity: Not applicates for overall effect: Z = .1.3 Manual Therapy ve sytar 2015 set for overall effect: Z = est for overall effect: Z = .1.4 Manual Therapy pl   | oo; Chi² = 0<br>0.16 (P = 0.89 on | 0.44, df = 2<br>0.87)<br>ise versus<br>40.8187<br>0.00001)<br>pervised E                                    | 52<br>2 (P = 0<br>5 Natur<br>42<br>42<br>xercis<br>8            | 0.80); I <sup>2</sup> = 0 ropathic C: 47.46                      | %<br>are (Diet, A<br>30.8038                            | 55<br>Acupu<br>43                          | 100.0%<br>ncture, etc<br>100.0%                   | 0.03 [-0.35, 0.41]<br>s)<br>-1.28 [-1.75, -0.81]  |                    |
| leterogeneity: Tau² = 0.0 lest for overall effect: Z =  1.2 Manual Therapy pl subtotal (95% CI) leterogeneity: Not applicates for overall effect: Z =  1.3 Manual Therapy very systar 2015 leterogeneity: Not applicates for overall effect: Z =  1.4 Manual Therapy pl  1.4 Manual Therapy pl  | us Exerci 0.89 able 5.35 (P < ersus Sup 173 able 0.24 (P = us Exerci  | e 0.87) se versus 40.8187 c 0.00001) servised E 8   | 2 (P = 0  Natur 42 42 xercis 8                                  | opathic C<br>47.46   | are (Diet, A<br>30.8038                                 | Acupu<br>43                                | ncture, etc                                       | :)<br>-1.28 [-1.75, -0.81]  |                    |
| est for overall effect: Z =  .1.2 Manual Therapy pl szczurko 2009 subtotal (95% CI) leterogeneity: Not applicatest for overall effect: Z =  .1.3 Manual Therapy verytar 2015 subtotal (95% CI) leterogeneity: Not applicatest for overall effect: Z =  .1.4 Manual Therapy pl   | us Exerci 0.89 able 5.35 (P < ersus Sup 173 able 0.24 (P = us Exerci  | e 0.87) se versus 40.8187 c 0.00001) servised E 8   | Natur<br>42<br>42<br>42<br>xercis                               | opathic C<br>47.46   | are (Diet, A<br>30.8038                                 | 43   | 100.0%  | -1.28 [-1.75, -0.81]  |                    |
| szczurko 2009 subtotal (95% CI) leterogeneity: Not applicates for overall effect: Z = .1.3 Manual Therapy verytar 2015 subtotal (95% CI) leterogeneity: Not applicates for overall effect: Z = .1.4 Manual Therapy pl   | 0.89 dable 5.35 (P < ersus Sup 173 able 0.24 (P = us Exerci   | 40.8187<br>: 0.00001)<br>pervised E<br>8  | 42<br>42<br>xercis  | 47.46  | 30.8038   | 43   | 100.0%  | -1.28 [-1.75, -0.81]  |                    |
| subtotal (95% CI) leterogeneity: Not applicates for overall effect: Z = .1.3 Manual Therapy very tar 2015 subtotal (95% CI) leterogeneity: Not applicates for overall effect: Z = .1.4 Manual Therapy pl  | able<br>: 5.35 (P <<br>ersus Sup<br>173<br>able<br>: 0.24 (P =  | 0.00001)<br>pervised E<br>8   | 42<br>xercis<br>8   | e  |   |  |   |   | •                  |
| leterogeneity: Not appliciest for overall effect: Z = .1.3 Manual Therapy veytar 2015 subtotal (95% CI) leterogeneity: Not appliciest for overall effect: Z = .1.4 Manual Therapy pl  | able<br>: 5.35 (P <<br>ersus Sup<br>173<br>able<br>: 0.24 (P =  | 0.00001)<br>pervised E<br>8   | 42<br>xercis<br>8   | e  |   |  |   |   | ▼                  |
| leterogeneity: Not appliciest for overall effect: Z = .1.3 Manual Therapy veytar 2015 subtotal (95% CI) leterogeneity: Not appliciest for overall effect: Z = .1.4 Manual Therapy pl  | : 5.35 (P <<br>ersus Sup<br>173<br>able<br>: 0.24 (P =  | ervised E<br>8  | 8   |  |   |  |   | -   |                    |
| .1.3 Manual Therapy very<br>sytar 2015<br>subtotal (95% CI)<br>leterogeneity: Not applicates<br>est for overall effect: Z =<br>.1.4 Manual Therapy pl   | able : 0.24 (P =  | ervised E<br>8  | 8   |  |   |  |   |   |                    |
| ytar 2015<br>iubtotal (95% CI)<br>leterogeneity: Not applic<br>est for overall effect: Z =<br>.1.4 Manual Therapy pl  | 173 able : 0.24 (P =  | 8   | 8   |  |   |  |   |   |                    |
| ubtotal (95% CI)<br>leterogeneity: Not applic<br>est for overall effect: Z =<br>.1.4 Manual Therapy pl  | able<br>: 0.24 (P =<br>us Exerci  |   |   | 17-  | 9   | 11   | 100.0%  | -0.11 [-1.02, 0.80]   | -                  |
| deterogeneity: Not applicates for overall effect: Z = .1.4 Manual Therapy pl  | : 0.24 (P =<br>us Exerci  | : 0.81)   | -   |  | 9   | 11   |   | -0.11 [-1.02, 0.80]   | -                  |
| est for overall effect: Z = .1.4 Manual Therapy pl  | : 0.24 (P =<br>us Exerci  | : 0.81)   |   |  |   |  |   | . , ,   | Ĭ                  |
| .1.4 Manual Therapy pl  | us Exerci   | /   |   |  |   |  |   |   |                    |
|   |   |   |   |  |   |  |   |   |                    |
|   |   | ise versus  | Exerc   | ise Alone  |   |  |   |   |                    |
| Idio320W3Ki 2011  |   | 29.729  | 15  | 18.67  | 13.02   | 15   | 17.5%   | 1.48 [0.66, 2.31]   | <del></del>        |
| Citaker 2005  | 170.5   | 21.52   | 20  | 174.75   | 9.8   | 20   | 20.7%   | -0.25 [-0.87, 0.37]   | <del>-</del>       |
| Conroy 1998   | 125.71  | 26.21   | 7   | 133.86   | 27.82   | 7  | 14.1%   | -0.28 [-1.34, 0.77]   | <del>-</del>       |
| ust 2009  | 27.3  | 29.4  | 20  | 18.18  | 27.7  | 22   | 20.9%   | 0.31 [-0.30, 0.92]  | <del> -</del>      |
| Cachingwe 2008  |   | 84.4269   | 18  | 42.6   | 15.8  | 7  | 16.7%   | -0.15 [-1.02, 0.72]   | <del>-</del> +     |
| an Rensburg 2012  | 43.17   | 19.48   | 3   | 52.5   | 17.6  | 6  | 10.2%   | -0.46 [-1.87, 0.96]   | <del></del>        |
| Subtotal (95% CI)   |   |   | 83  |  |   | 77   | 100.0%  | 0.16 [-0.41, 0.73]  | <b>•</b>           |
| leterogeneity: Tau² = 0.3<br>est for overall effect: Z =  |   |   | 5 (P =  | 0.02); I <sup>2</sup> =  | 64%   |  |   |   |                    |
| .1.5 Immediate Effects  | Manual T  | herapy ve   | rsus F  | Placebo  |   |  |   |   |                    |
| elgado-Gil 2015   |   | 19.7718   | 21  |  | 19.7718   | 21   | 50.2%   | 0.07 [-0.54, 0.67]  | <u>+</u>           |
| 1cClatchie 2009   | 12.5  | 15.6  | 21  | 8.8  | 12.7  | 21   | 49.8%   | 0.26 [-0.35, 0.86]  | <del></del>        |
| Subtotal (95% CI)   |   |   | 42  |  |   |  | 100.0%  | 0.16 [-0.27, 0.59]  | <b>♦</b>           |
| leterogeneity: Tau² = 0.0<br>est for overall effect: Z =  |   |   | 1 (P = 0  | $0.67$ ); $I^2 = 0$  | %   |  |   |   |                    |
|   | ,   | ,   | _   |  |   |  |   |   |                    |
| .1.6 Manual Therapy pl  |   |   |   |  |   | -  | Kinesiota   |   |                    |
| Pekyavas 2016   | 161.21  | 8.21  | 16  | 180  | 0   | 20   |   | Not estimable   |                    |
| Subtotal (95% CI)   |   |   | 16  |  |   | 20   |   | Not estimable   |                    |
| leterogeneity: Not applicates<br>Test for overall effect: Not   |   | е   |   |  |   |  |   |   |                    |
| .1.7 Neck or Thoracic r   | nanual Th   | nerapy ver  | sus Si  | houlder Tr   | eatment Ir  | ncludii                                    | ng Manual   | Therapy of the Shoulder   |                    |
| Vright 2016   | 165.7   | 12.8  | 10  | 172.5  | 5.1   |  | 100.0%  | -0.64 [-1.60, 0.32]   | -                  |
| Subtotal (95% CI)   |   | . 2.0   | 10  |  | 0   | 8  | 100.0%  | -0.64 [-1.60, 0.32]   | <b>→</b>           |
| leterogeneity: Not application  | able  |   |   |  |   |  |   | - · · ·   |                    |
| est for overall effect: Z =   |   | 0.19)   |   |  |   |  |   |   |                    |
| .1.8 Manual Therapy wi  | ith Moven   | nent nlue   | Kineci  | iotaning ve  | rsue Sun  | arvico                                     | d Eversies  |   |                    |
| i r.o Maridar Therapy wi<br>Djordjevic 2012   | 170   | 17.89   | 10  | 60.5   | 15.72   |  | 100.0%  | 6.23 [3.90, 8.55]   |                    |
| Subtotal (95% CI)   | 170   | 17.09   | 10  | 00.5   | 13.72   |  | 100.0%  | 6.23 [3.90, 8.55]   |                    |
| leterogeneity: Not application  | able  |   |   |  |   |  |   | 3.20 [2.00, 3.00]   |                    |
| est for overall effect: Z =   |   | 0.00001)  |   |  |   |  |   |   |                    |
| .1.9 Manual Therapy ve  | ersus Myd   | ofascial Tr   | igger I   | Point  |   |  |   |   | _[                 |
| Sarra-Lopez 2015  | 17.63   | 19.62   | 19  | 23.11  | 17.2  | 19   | 100.0%  | -0.29 [-0.93, 0.35]   |                    |
| Subtotal (95% CI)   |   |   | 19  |  |   |  | 100.0%  | -0.29 [-0.93, 0.35]   | <b>▼</b>           |
| leterogeneity: Not application  | able  |   |   |  |   |  |   | •   |                    |
| est for overall effect: Z =   |   | 0.37)   |   |  |   |  |   |   |                    |
| _   | ,   | ,   |   |  |   |  |   |   |                    |
|   |   |   |   |  |   |  |   | _   | -4 -2 0 2 4        |

Figure Appendix-4c 7. Manual therapy: Outcome AROM at the longest follow-up

| tudy or Subgroup  | Maan                     | e D         | Total           | Maan                      | CD.          | Total         | Waiaht                   | IV Pandom 050/ CI  | IV Pandom 050/ CI  |
|---|--------------------------|-------------|-----------------|---------------------------|--------------|---------------|--------------------------|--|--------------------|
| 1.1 Manual Thorass  | Mean                     |             | Total           | Mean                      | 20           | rotal         | Weight                   | IV, Random, 95% CI                                       | IV, Random, 95% CI |
| 1.1 Manual Therapy  |                          |             |                 | 455.000=                  | 00 0005      | ~-            | 47                       | 0.0510.40.0.50   | <u> </u>           |
| tkinson 2008  | 157.1667                 |             | 30              | 155.8065                  |              | 30            | 47.4%                    | 0.05 [-0.46, 0.56]                                       | <u>T</u> .         |
| ytar 2015   | 173                      | 10          | 20              | 171                       | 9            | 20            | 31.4%                    | 0.21 [-0.42, 0.83]                                       |                    |
| uimaraes 2016   | 8.9                      | 41.0473     | 14              | 15.4                      | 40.7087      | 13            | 21.2%                    | -0.15 [-0.91, 0.60]                                      |                    |
| ubtotal (95% CI)  |                          |             | 64              |                           | .,           | 63            | 100.0%                   | 0.06 [-0.29, 0.40]                                       | Y                  |
| eterogeneity: Tau <sup>2</sup> = 6<br>est for overall effect: 2 |                          |             | 2 (P = (        | ).77); I <sup>2</sup> = 0 | %            |               |                          |  |                    |
| 1.2 Manual Therapy  | plus Exerc               | ise versus  | s Exerc         | ise Alone                 |              |               |                          |  |                    |
| ialoszewski 2011  | 53.67                    | 29.729      | 15              | 18.67                     | 13.02        | 15            | 17.5%                    | 1.48 [0.66, 2.31]  | -                  |
| itaker 2005   | 170.5                    | 21.52       | 20              | 174.75                    | 9.8          | 20            | 20.7%                    | -0.25 [-0.87, 0.37]                                      | -                  |
| onroy 1998  | 125.71                   | 26.21       | 7               | 133.86                    | 27.82        | 7             | 14.1%                    | -0.28 [-1.34, 0.77]                                      | <del></del>        |
| ıst 2009  | 27.3                     | 29.4        | 20              | 18.18                     | 27.7         | 22            | 20.9%                    | 0.31 [-0.30, 0.92]                                       | <del> -</del>      |
| achingwe 2008   |                          | 84.4269     | 18              | 42.6                      | 15.8         | 7             | 16.7%                    | -0.15 [-1.02, 0.72]                                      | <del>-</del>       |
| an Rensburg 2012  | 43.17                    | 19.48       | 3               | 52.5                      | 17.6         | 6             | 10.2%                    | -0.46 [-1.87, 0.96]                                      |                    |
| ubtotal (95% CI)  | .0.17                    | 10.40       | 83              | 02.0                      | 17.0         |               | 100.0%                   | 0.16 [-0.41, 0.73]                                       | •                  |
| eterogeneity: Tau² =  | 0.31: Chi <sup>2</sup> = | 13.76 df =  |                 | 0.02\· I² =               | 64%          |               |                          | - / -  | ſ                  |
| est for overall effect: 2                                       |                          |             | ٠ (،            | 0.02), .                  | 0.70         |               |                          |  |                    |
| 1.3 Manual Therapy  |                          |             |                 |                           | 0            | 20            | 100.00/                  | 0.22.0.44.0.04   |                    |
| ytar 2015<br>ubtotal (95% CI)                                   | 173                      | 10          | 20<br><b>20</b> | 171                       | 8            |               | 100.0%<br><b>100.0</b> % | 0.22 [-0.41, 0.84]<br><b>0.22 [-0.41</b> , <b>0.84</b> ] | <b>.</b>           |
| eterogeneity: Not app<br>est for overall effect: 2              |                          | = 0.50)     | 20              |                           |              | 20            | 100.070                  | 0.22 [ 0.41, 0.04]                                       |                    |
| 1.4 Manual Therapy  | plus Exerc               | ise versus  | s Natur         | opathic Ca                | are (Diet, A | Acupu         | ncture,etc)              |  |                    |
| zczurko 2009  | 0.89                     | 40.8187     | 42              | 47.46                     | 30.8038      | 43            | 100.0%                   | -1.28 [-1.75, -0.81]                                     |                    |
| ubtotal (95% CI)  |                          |             | 42              |                           |              | 43            | 100.0%                   | -1.28 [-1.75, -0.81]                                     | ▼                  |
| eterogeneity: Not app<br>est for overall effect: 2              |                          | < 0.00001)  |                 |                           |              |               |                          |  |                    |
| 1.5 Immediate Effec   | ts Manual T              | herapy ve   | ersus F         | Placebo                   |              |               |                          |  |                    |
| elgado-Gil 2015   | 7.2                      | 19.7718     | 21              | 5.8                       | 19.7718      | 21            | 50.2%                    | 0.07 [-0.54, 0.67]                                       | <del>*</del>       |
| cClatchie 2009  | 12.5                     | 15.6        | 21              | 8.8                       | 12.7         | 21            | 49.8%                    | 0.26 [-0.35, 0.86]                                       | <del>[</del>       |
| ubtotal (95% CI)  |                          |             | 42              |                           |              | 42            | 100.0%                   | 0.16 [-0.27, 0.59]                                       | <b>♦</b>           |
| eterogeneity: Tau² = 0<br>est for overall effect: 2             |                          |             | 1 (P = 0        | 0.67); I <sup>2</sup> = 0 | %            |               |                          |  |                    |
| 1.6 Manual Therapy  | plus Kines               | iotane plu  | ıs Exer         | cise versu                | s Exercis    | e plus        | Kinesiotan               | ne   |                    |
| ekyavas 2016  | 161.21                   | 8.21        | 16              | 180                       | 0            | 20            |                          | Not estimable  |                    |
| ubtotal (95% CI)  | 101.21                   | 0.21        | 16              | 100                       | U            | 20<br>20      |                          | Not estimable  |                    |
| eterogeneity: Not app   | olicable                 |             |                 |                           |              |               |                          | Johnnand   |                    |
| est for overall effect: I                                       |                          | le          |                 |                           |              |               |                          |  |                    |
| 1.7 Neck or Thoraci   | c manual Th              | nerapy ve   | rsus S          | houlder Tr                | eatment lı   | ncludii       | ng Manual                | Therapy of the Shoulder                                  |                    |
| right 2016<br>ubtotal (95% CI)                                  | 165.7                    | 12.8        | 10<br><b>10</b> | 172.5                     | 5.1          | 8<br><b>8</b> | 100.0%<br><b>100.0</b> % | -0.64 [-1.60, 0.32]<br><b>-0.64 [-1.60, 0.32</b> ]       | -                  |
| eterogeneity: Not appeat for overall effect: 2                  |                          | = 0.19)     |                 |                           |              |               |                          |  |                    |
| 1.8 Manual Therapy  | with Mover               | nent plus   | Kinesi          | otaping ve                | rsus Sup     | ervise        | d Exercise               |  |                    |
| jordjevic 2012<br>ubtotal (95% CI)                              | 170                      | 17.89       | 10<br><b>10</b> | 60.5                      | 15.72        |               | 100.0%<br>100.0%         | 6.23 [3.90, 8.55]<br><b>6.23 [3.90</b> , <b>8.55</b> ]   |                    |
| eterogeneity: Not app   | dicable                  |             | 10              |                           |              | 10            | .00.070                  | 0.20 [0.00, 0.00]  |                    |
| eterogeneity: Not app<br>est for overall effect: 2              |                          | < 0.00001)  |                 |                           |              |               |                          |  |                    |
| 1.9 Manual Therapy  | versus My                | ofascial Ti | rigger          | Point                     |              |               |                          |  | <u></u>            |
| arra-Lopez 2015<br>ubtotal (95% CI)                             | 17.63                    | 19.62       | 19<br><b>19</b> | 23.11                     | 17.2         |               | 100.0%<br>100.0%         | -0.29 [-0.93, 0.35]<br>- <b>0.29 [-0.93, 0.35</b> ]      | -                  |
| eterogeneity: Not app   | olicable                 |             |                 |                           |              |               |                          | ,  |                    |
|   |                          | = 0.37)     |                 |                           |              |               |                          |  |                    |
| est for overall effect: 2                                       |                          |             |                 |                           |              |               |                          |  |                    |

Figure Appendix-4c 8. Manual therapy: Outcome AROM at the shortest follow-up

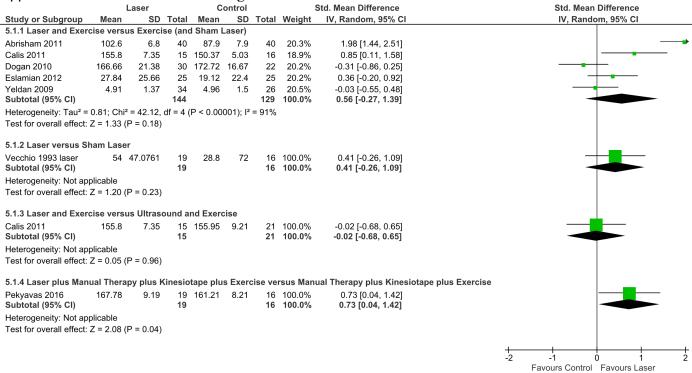


Figure Appendix-4c 9. Laser: Outcome AROM at the longest follow-up

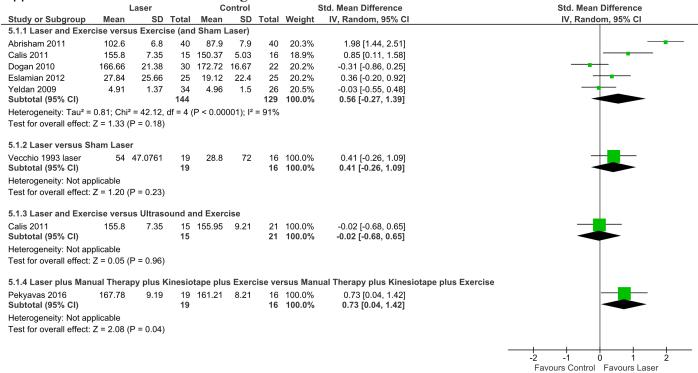


Figure Appendix-4c 10. Laser: Outcome AROM at the shortest follow-up

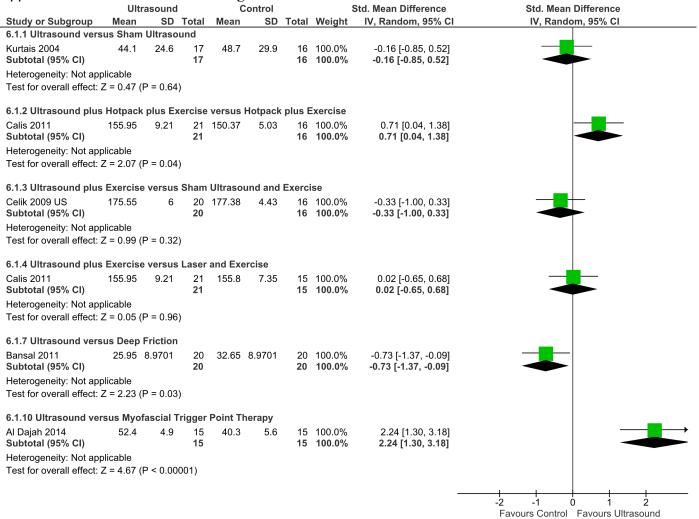
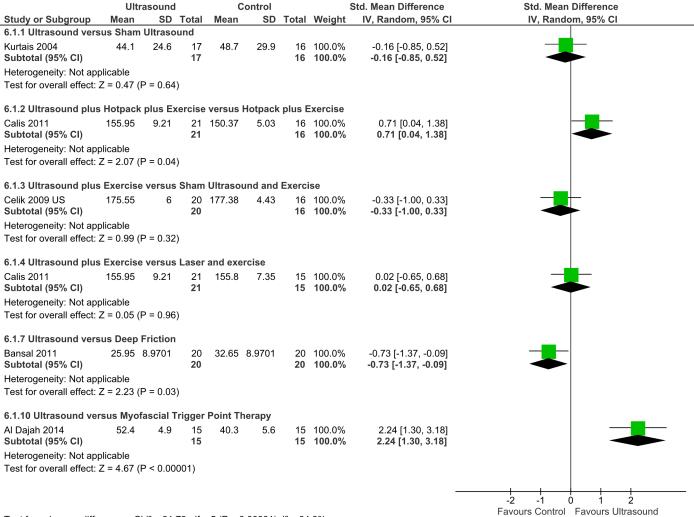


Figure Appendix-4c 11. Ultrasound: Outcome AROM at the longest follow-up



Test for subgroup differences:  $Chi^2 = 31.79$ , df = 5 (P < 0.00001),  $I^2 = 84.3\%$ 

Figure Appendix-4c 12. Ultrasound: Outcome AROM at the shortest follow-up

Figure Appendix-4c 13. Extracorporeal shockwave therapy (ECSWT): Outcome AROM at the longest follow-up

| _                        | ECSWT    |        |       | С     | ontrol |       | ;      | Std. Mean Difference | Std. Mean Difference         |  |  |  |
|--------------------------|----------|--------|-------|-------|--------|-------|--------|----------------------|------------------------------|--|--|--|
| Study or Subgroup        | Mean     | SD     | Total | Mean  | SD     | Total | Weight | IV, Random, 95% CI   | IV, Random, 95% CI           |  |  |  |
| 7.1.2 ECSWT versus       | Sham E   | CSWI   | Г     |       |        |       |        |                      |                              |  |  |  |
| Galasso 2012             | 30.9     | 9.05   | 11    | 18.22 | 10.5   | 9     | 100.0% | 1.25 [0.27, 2.23]    | <del>-    </del>             |  |  |  |
| Subtotal (95% CI)        |          |        | 11    |       |        | 9     | 100.0% | 1.25 [0.27, 2.23]    |                              |  |  |  |
| Heterogeneity: Not ap    | plicable |        |       |       |        |       |        |                      |                              |  |  |  |
| Test for overall effect: | Z = 2.50 | (P = 0 | 0.01) |       |        |       |        |                      |                              |  |  |  |
|                          |          |        |       |       |        |       |        |                      |                              |  |  |  |
|                          |          |        |       |       |        |       |        | _                    |                              |  |  |  |
|                          |          |        |       |       |        |       |        |                      | -2 -1 0 1 2                  |  |  |  |
|                          |          |        |       |       |        |       |        |                      | Favours Control Favours ECSW |  |  |  |

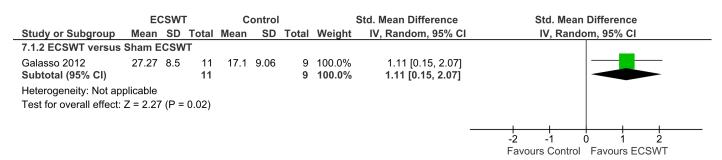


Figure Appendix-4c 14. Extracorporeal shockwave therapy (ECSWT): Outcome AROM at the shortest follow-up

| Study or Subgroup   Mean   SD Total   SD Total | Appendix 4c 11                    | orest I I   |                       | LIVC    | _          |                                      | uon   |         | Otal Maan Difference | Cad Many Difference                              |
|---|-----------------------------------|-------------|-----------------------|---------|------------|--------------------------------------|-------|---------|----------------------|--|
| 8.1.1 Tape plus Exercise versus Physiotherapy (including exercise) Miller 2009 129 14.81 6 127 51.85 11 31.2% 0.04 [-0.95, 1.04] Pekyavas 2016 180 0.00001 20 180 0.00001 15 68.8% 0.00 [-0.67, 0.67] Subtotal (95% CI) 26 100.0% 0.01 [-0.54, 0.57] Heterogeneity: Tau** = 0.00; Chi** = 0.01, df = 1 (P = 0.94); i** = 0% Test for overall effect: Z = 0.05 (P = 0.96) 30 -3.15 12.2142 30 21.2% 1.24 [0.68, 1.79] Shakerl 2013 172.33 15.2208 15 174.2 8.0945 15 18.4% -0.15 [-0.87, 0.57] Thelen 2008 36 33.9 21 25.7 23.1 21 20.3% 0.35 [-0.26, 0.96] Singek 2013 158.95 22.14 19 160.58 21.44 19 19.8% -0.07 [-0.71, 0.56] Subtotal (95% CI) 106 1 14.5 35 165.4 21.7 35 51.5% 0.04 [-0.43, 0.51] Test for overall effect: Z = 1.07 (P = 0.28)  8.1.3 Tape and Exercise versus Corticosteroids and Exercise Göksu 2015 132.2 21.08 30 142.9 16.11 31 48.5% -0.56 [-1.08, -0.05] Subasi 2015 132.2 21.08 30 142.9 16.11 31 48.5% -0.56 [-1.08, -0.05] Subasi 2015 132.2 21.08 30 142.9 16.11 31 48.5% -0.56 [-1.08, -0.05] Subasi 2015 132.2 21.08 30 142.9 16.11 31 48.5% -0.56 [-1.08, -0.05] Subasi 2015 31.3 158.95 31.3 158.9 31 100.0% -0.25 [-0.94, 0.34] Heterogeneity: Tau** = 0.12; Chi** = 2.88, df = 1 (P = 0.09); i** = 65% Test for overall effect: Z = 0.84 (P = 0.40)  8.1.4 Kinesiotape plus NSAID versus Corticosteroid plus NSAID Sahin 2016 34.8 5.7 33 37.3 5.8 33 100.0% -0.43 [-0.92, 0.06] Heterogeneity: Not applicable Test for overall effect: Z = 1.72 (P = 0.08)  8.1.5 Kinesiotape plus NSAID versus NSAID Sahin 2016 34.8 5.7 33 13.6 2.3 33 100.0% 4.82 [3.84, 5.80] Heterogeneity: Not applicable Test for overall effect: Z = 9.68 (P < 0.00001)   | Ot                                |             |                       | T-4-1   |            |                                      | T-4-1 |         |                      |  |
| Miller 2009 129 14.81 6 127 51.85 11 31.2% 0.04 [-0.95, 1.04] Pekyavas 2016 180 0.0001 20 180 0.0001 15 68.8% 0.00 [-0.67, 0.67]  Heterogeneity: Tau² = 0.00; Chi² = 0.06)  8.1.2 Tape versus Sham Tape Kooyigit 2016 170.9 22.1 21 170.9 22.1 20 20.2% 0.00 [-0.61, 0.61] Lewis 2005 14.7 15.9935 30 3.15 12.2142 30 21.2% 1.24 [0.8, 1.79] Shakeri 2013 172.33 15.2208 15 174.2 8.0945 15 18.4% 0.15 [-0.15, 0.06] Thelen 2008 36 33.9 21 25.7 23.1 21 20.3% 0.35 [-0.26, 0.96] Sjimşek 2013 15.232 22.14 19 160.88 21.44 19 19.8% 0.07 [-0.71, 0.56] Subtotal (95% C)] 106 105 100.% 0.29 [-0.24, 0.82] Heterogeneity: Tau² = 0.27; Chi² = 1.463, df = 4 (P = 0.006); I² = 73% Test for overall effect: Z = 1.07 (P = 0.28)  8.1.3 Tape and Exercise versus Corticosteroids and Exercise Göksu 2015 132.2 21.08 30 142.9 16.11 31 48.5% -0.56 [-1.08, -0.05] Subtotal (95% C)) 65 65 66 100.0% -0.43 [-0.92, 0.06] Heterogeneity: Tau² = 0.12; Chi² = 2.89, df = 1 (P = 0.09); I² = 65% Test for overall effect: Z = 0.34 (P = 0.40)  8.1.4 Kinesiotape plus NSAID versus Corticosteroid plus NSAID Sahin 2016 34.8 5.7 33 37.3 5.8 33 100.0% -0.43 [-0.92, 0.06] Heterogeneity: Not applicable Test for overall effect: Z = 1.72 (P = 0.08)  8.1.5 Kinesiotape plus NSAID versus NSAID Sahin 2016 34.8 5.7 33 13.6 2.3 33 100.0% 4.82 [3.84, 5.80] Subtotal (95% C)) 4.82 5.7 33 13.6 2.3 33 100.0% 4.82 [3.84, 5.80] Heterogeneity: Not applicable Test for overall effect: Z = 9.68 (P < 0.00001)   |                                   |             |                       |         |            |                                      |       | vveignt | IV, Random, 95% CI   | IV, Random, 95% CI                               |
| Pekyavas 2016 180 0.00001 20 180 0.00001 15 68.8% 0.00 [-0.67, 0.67] 26 100.0% 0.01 [-0.54, 0.57]  Heterogeneity: Tau² = 0.00; Chi² = 0.01, df = 1 (P = 0.94); I² = 0%    1-4   |                                   |             | -                     |         |            | -                                    | •     | 04.00/  | 0.041.0.05.4.041     |  |
| Subtotal (95% CI) 26 26 10.0% 0.01 [-0.54, 0.57]  Heterogeneity: Tau² = 0.00; Chi² = 0.01, df = 1 (P = 0.94); l² = 0% Test for overall effect: Z = 0.05 (P = 0.96)  8.1.2 Tape versus Sham Tape  Kocyigit 2016 170.9 22.1 21 170.9 22.1 20 20.2% 0.00 [-0.61, 0.61]  Lewis 2005 14.7 15.9935 30 -3.15 12.2142 30 21.2% 1.24 [0.68, 7.79] Shakeri 2013 172.33 15.2208 15 174.2 8.0945 15 18.4% -0.15 [-0.87, 0.57] Thelen 2008 36 33.9 21 25.7 23.1 21 20.3% 0.35 [-0.26, 0.96] Simsek 2013 158.95 22.14 19 160.58 21.44 19 19.88% -0.07 [-0.71, 0.56] Subtotal (95% CI) 106 105 100.0% 0.29 [-0.24, 0.82]  Heterogeneity: Tau² = 0.27; Chi² = 14.63, df = 4 (P = 0.006); l² = 73% Test for overall effect: Z = 1.07 (P = 0.28)  8.1.3 Tape and Exercise versus Corticosteroids and Exercise Göksu 2015 132.2 21.08 30 142.9 16.11 31 48.5% -0.56 [-1.08, -0.05] Subtotal (95% CI) 132.2 21.08 30 142.9 16.11 31 48.5% -0.25 [-0.84, 0.34] Heterogeneity: Tau² = 0.12; Chi² = 2.89, df = 1 (P = 0.09); l² = 65% Test for overall effect: Z = 0.84 (P = 0.40)  8.1.4 Kinesiotape plus NSAID versus Corticosteroid plus NSAID Sahin 2016 34.8 5.7 33 37.3 5.8 33 100.0% -0.43 [-0.92, 0.06] Heterogeneity: Not applicable Test for overall effect: Z = 1.72 (P = 0.08)  8.1.5 Kinesiotape plus NSAID versus NSAID Sahin 2016 34.8 5.7 33 33.3 3.6 2.3 33 100.0% 4.82 [3.84, 5.80] Heterogeneity: Not applicable Test for overall effect: Z = 9.68 (P < 0.00001)  |                                   |             |                       |         |            |                                      |       |         |                      |  |
| **Rest for overall effect: Z = 0.05 (P = 0.96)**  **8.1.2 Tape versus Sham Tape**  **Kocyigii 2016  | Subtotal (95% CI)                 |             |                       | 26      |            |                                      |       |         |                      | •  |
| 8.1.2 Tape versus Sham Tape  Kocyigii 2016 170.9 22.1 21 170.9 22.1 20 20.2% 0.00 [-0.61, 0.61]  Lewis 2005 14.7 15.9935 30 -3.15 12.2142 30 21.2% 1.24 [0.88, 1.79]  Shakeri 2013 172.33 15.2208 15 174.2 8.0945 15 18.4% -0.15 [-0.87, 0.57]  Thelen 2008 36 33.9 21 25.7 23.1 21 20.3% 0.35 [-0.26, 0.96]  Şimşek 2013 158.95 22.14 19 160.58 21.44 19 19.8% -0.07 [-0.71, 0.56]  Subtotal (95% CI) 106 105 100.0% 0.29 [-0.24, 0.82]  Heterogeneity: Tau² = 0.27; Chi² = 14.63, df = 4 (P = 0.006); I² = 73%  Test for overall effect: Z = 1.07 (P = 0.28)  8.1.3 Tape and Exercise versus Corticosteroids and Exercise  Göksu 2015 132.2 21.08 30 142.9 16.11 31 48.5% -0.56 [-1.08, -0.05]  Subtotal (95% CI) 65 5 66 100.0% -0.25 [-0.84, 0.34]  Heterogeneity: Tau² = 0.12; Chi² = 2.89, df = 1 (P = 0.09); I² = 65%  Test for overall effect: Z = 0.84 (P = 0.40)  8.1.4 Kinesiotape plus NSAID versus Corticosteroid plus NSAID  Sahin 2016 34.8 5.7 33 37.3 5.8 33 100.0% -0.43 [-0.92, 0.06]  8.1.5 Kinesiotape plus NSAID versus NSAID  Sahin 2016 34.8 5.7 33 13.6 2.3 33 100.0% 4.82 [3.84, 5.80]  8.1.5 Kinesiotape plus NSAID versus NSAID  Sahin 2016 34.8 5.7 33 13.6 2.3 33 100.0% 4.82 [3.84, 5.80]  8.1.5 Kinesiotape plus NSAID versus NSAID  Sahin 2016 34.8 5.7 33 13.6 2.3 33 100.0% 4.82 [3.84, 5.80]  Baltotal (95% CI) 33 3 3 100.0% 4.82 [3.84, 5.80]  Heterogeneity: Not applicable  Test for overall effect: Z = 9.68 (P < 0.00001)   | 0 ,                               |             |                       | ,       | P = 0.94); | $I^2 = 0\%$                          |       |         |                      |  |
| Kocyigit 2016   | Test for overall effect           | : Z = 0.05  | (P = 0.96)            |         |            |                                      |       |         |                      |  |
| Lewis 2005  | 8.1.2 Tape versus S               | ham Tape    |                       |         |            |                                      |       |         |                      |  |
| Shakeri 2013 172.33 15.2208 15 174.2 8.0945 15 18.4% -0.15 [-0.87, 0.57] Thelen 2008 36 33.9 21 25.7 23.1 21 20.3% 0.35 [-0.26, 0.96] Simpsek 2013 158.95 22.14 19 160.58 21.44 19 19.8% -0.07 [-0.71, 0.56] Subtotal (95% CI) 106 105 100.0% 0.29 [-0.24, 0.82]  Heterogeneity: Tau² = 0.27; Chi² = 14.63, df = 4 (P = 0.006); i² = 73%  Test for overall effect: Z = 1.07 (P = 0.28)  8.1.3 Tape and Exercise versus Corticosteroids and Exercise Göksu 2015 132.2 21.08 30 142.9 16.11 31 48.5% -0.56 [-1.08, -0.05] Subtotal (95% CI) 65 5 66 100.0% -0.25 [-0.84, 0.34]  Heterogeneity: Tau² = 0.12; Chi² = 2.89, df = 1 (P = 0.09); i² = 65%  Test for overall effect: Z = 0.84 (P = 0.40)  8.1.4 Kinesiotape plus NSAID versus Corticosteroid plus NSAID Sahin 2016 34.8 5.7 33 37.3 5.8 33 100.0% -0.43 [-0.92, 0.06] Subtotal (95% CI) 33 3 100.0% -0.43 [-0.92, 0.06]  Heterogeneity: Not applicable Test for overall effect: Z = 1.72 (P = 0.08)  8.1.5 Kinesiotape plus NSAID versus NSAID Sahin 2016 34.8 5.7 33 13.6 2.3 33 100.0% 4.82 [3.84, 5.80]  Heterogeneity: Not applicable Test for overall effect: Z = 9.68 (P < 0.00001)   | Kocyigit 2016                     | 170.9       | 22.1                  | 21      | 170.9      | 22.1                                 | 20    | 20.2%   | 0.00 [-0.61, 0.61]   | <del></del>                                      |
| Thelen 2008 36 33.9 21 25.7 23.1 21 20.3% 0.35 [-0.26, 0.96] Simsek 2013 158.95 22.14 19 160.58 21.44 19 19.8% -0.07 [-0.71, 0.56] Subtotal (95% CI) 106 105 100.0% 0.29 [-0.24, 0.82] Heterogeneity: Tau² = 0.27; Chi² = 14.63, df = 4 (P = 0.006); l² = 73% Test for overall effect: Z = 1.07 (P = 0.28)  8.1.3 Tape and Exercise versus Corticosteroids and Exercise Göksu 2015 132.2 21.08 30 142.9 16.11 31 48.5% -0.56 [-1.08, -0.05] Subasi 2014 166.1 14.5 35 165.4 21.7 35 51.5% 0.04 [-0.43, 0.51] Subtotal (95% CI) 65 66 100.0% -0.25 [-0.84, 0.34] Heterogeneity: Tau² = 0.12; Chi² = 2.89, df = 1 (P = 0.09); l² = 65% Test for overall effect: Z = 0.84 (P = 0.40)  8.1.4 Kinesiotape plus NSAID versus Corticosteroid plus NSAID Sahin 2016 34.8 5.7 33 37.3 5.8 33 100.0% -0.43 [-0.92, 0.06] Heterogeneity: NSAID versus NSAID Sahin 2016 34.8 5.7 33 13.6 2.3 33 100.0% 4.82 [3.84, 5.80] Heterogeneity: Not applicable Test for overall effect: Z = 9.68 (P < 0.00001)  Heterogeneity: Not applicable Test for overall effect: Z = 9.68 (P < 0.00001)   | Lewis 2005                        | 14.7        | 15.9935               | 30      | -3.15      | 12.2142                              | 30    | 21.2%   | 1.24 [0.68, 1.79]    | <del></del>                                      |
| Simpek 2013 158.95 22.14 19 160.58 21.44 19 19.8% -0.07 [-0.71, 0.56] Subtotal (95% CI) 106 105 100.0% 0.29 [-0.24, 0.82]  Heterogeneity: Tau² = 0.27; Chi² = 14.63, df = 4 (P = 0.006); i² = 73% Test for overall effect: Z = 1.07 (P = 0.28)  8.1.3 Tape and Exercise versus Corticosteroids and Exercise Göksu 2015 132.2 21.08 30 142.9 16.11 31 48.5% -0.56 [-1.08, -0.05] Subasi 2014 166.1 14.5 35 165.4 21.7 35 51.5% 0.04 [-0.43, 0.51] Subtotal (95% CI) 65 6100.0% -0.25 [-0.84, 0.34] Heterogeneity: Tau² = 0.12; Chi² = 2.89, df = 1 (P = 0.09); i² = 65% Test for overall effect: Z = 0.84 (P = 0.40)  8.1.4 Kinesiotape plus NSAID versus Corticosteroid plus NSAID Sahin 2016 34.8 5.7 33 37.3 5.8 33 100.0% -0.43 [-0.92, 0.06] Heterogeneity: Not applicable Test for overall effect: Z = 1.72 (P = 0.08)  8.1.5 Kinesiotape plus NSAID versus NSAID Sahin 2016 34.8 5.7 33 13.6 2.3 33 100.0% 4.82 [3.84, 5.80] Heterogeneity: Not applicable Test for overall effect: Z = 9.68 (P < 0.00001)  | Shakeri 2013                      | 172.33      | 15.2208               | 15      | 174.2      | 8.0945                               | 15    | 18.4%   | -0.15 [-0.87, 0.57]  | <del></del>                                      |
| Subtotal (95% CI) 106 105 100.0% 0.29 [-0.24, 0.82]  Heterogeneity: Tau² = 0.27; Chi² = 14.63, df = 4 (P = 0.006); I² = 73%  Test for overall effect: Z = 1.07 (P = 0.28)  8.1.3 Tape and Exercise versus Corticosteroids and Exercise  Göksu 2015 132.2 21.08 30 142.9 16.11 31 48.5% -0.56 [-1.08, -0.05]  Subasi 2014 166.1 14.5 35 165.4 21.7 35 51.5% 0.04 [-0.43, 0.51]  Subtotal (95% CI) 65 66 100.0% -0.25 [-0.84, 0.34]  Heterogeneity: Tau² = 0.12; Chi² = 2.89, df = 1 (P = 0.09); I² = 65%  Test for overall effect: Z = 0.84 (P = 0.40)  8.1.4 Kinesiotape plus NSAID versus Corticosteroid plus NSAID  Sahin 2016 34.8 5.7 33 37.3 5.8 33 100.0% -0.43 [-0.92, 0.06]  Heterogeneity: Not applicable  Test for overall effect: Z = 1.72 (P = 0.08)  8.1.5 Kinesiotape plus NSAID versus NSAID  Sahin 2016 34.8 5.7 33 13.6 2.3 33 100.0% 4.82 [3.84, 5.80]  Heterogeneity: Not applicable  Test for overall effect: Z = 9.68 (P < 0.00001)  | Thelen 2008                       | 36          | 33.9                  | 21      | 25.7       | 23.1                                 | 21    | 20.3%   | 0.35 [-0.26, 0.96]   | +  |
| Heterogeneity: Tau² = 0.27; Chi² = 14.63, df = 4 (P = 0.006); i² = 73% Test for overall effect: Z = 1.07 (P = 0.28)  8.1.3 Tape and Exercise versus Corticosteroids and Exercise Göksu 2015 132.2 21.08 30 142.9 16.11 31 48.5% -0.56 [-1.08, -0.05] Subasi 2014 166.1 14.5 35 165.4 21.7 35 51.5% 0.04 [-0.43, 0.51] Subtotal (95% CI) 65 -65 -66 100.0% -0.25 [-0.84, 0.34] Heterogeneity: Tau² = 0.12; Chi² = 2.89, df = 1 (P = 0.09); i² = 65% Test for overall effect: Z = 0.84 (P = 0.40)  8.1.4 Kinesiotape plus NSAID versus Corticosteroid plus NSAID Sahin 2016 34.8 5.7 33 37.3 5.8 33 100.0% -0.43 [-0.92, 0.06] Subtotal (95% CI) 33 3 100.0% -0.43 [-0.92, 0.06] Heterogeneity: Not applicable Test for overall effect: Z = 1.72 (P = 0.08)  8.1.5 Kinesiotape plus NSAID versus NSAID Sahin 2016 34.8 5.7 33 13.6 2.3 33 100.0% 4.82 [3.84, 5.80] Heterogeneity: Not applicable Test for overall effect: Z = 9.68 (P < 0.00001)  | Şimşek 2013                       | 158.95      | 22.14                 | 19      | 160.58     | 21.44                                | 19    | 19.8%   | -0.07 [-0.71, 0.56]  | <del>- 4.</del>                                  |
| 8.1.3 Tape and Exercise versus Corticosteroids and Exercise Göksu 2015 132.2 21.08 30 142.9 16.11 31 48.5% -0.56 [-1.08, -0.05] Subasi 2014 166.1 14.5 35 165.4 21.7 35 51.5% 0.04 [-0.43, 0.51] Subtotal (95% CI) 65 66 100.0% -0.25 [-0.84, 0.34] Heterogeneity: Tau² = 0.12; Chi² = 2.89, df = 1 (P = 0.09); l² = 65% Test for overall effect: Z = 0.84 (P = 0.40)  8.1.4 Kinesiotape plus NSAID versus Corticosteroid plus NSAID Sahin 2016 34.8 5.7 33 37.3 5.8 33 100.0% -0.43 [-0.92, 0.06] Heterogeneity: Not applicable Test for overall effect: Z = 1.72 (P = 0.08)  8.1.5 Kinesiotape plus NSAID versus NSAID Sahin 2016 34.8 5.7 33 13.6 2.3 33 100.0% 4.82 [3.84, 5.80]  Heterogeneity: Not applicable Test for overall effect: Z = 9.68 (P < 0.00001)   | Subtotal (95% CI)                 |             |                       | 106     |            |                                      | 105   | 100.0%  | 0.29 [-0.24, 0.82]   | <b>◆</b>   |
| 8.1.3 Tape and Exercise versus Corticosteroids and Exercise  Göksu 2015 132.2 21.08 30 142.9 16.11 31 48.5% -0.56 [-1.08, -0.05]  Subasi 2014 166.1 14.5 35 165.4 21.7 35 51.5% 0.04 [-0.43, 0.51]  Subtotal (95% CI) 65 66 100.0% -0.25 [-0.84, 0.34]  Heterogeneity: Tau² = 0.12; Chi² = 2.89, df = 1 (P = 0.09); I² = 65%  Test for overall effect: Z = 0.84 (P = 0.40)  8.1.4 Kinesiotape plus NSAID versus Corticosteroid plus NSAID  Sahin 2016 34.8 5.7 33 37.3 5.8 33 100.0% -0.43 [-0.92, 0.06]  Subtotal (95% CI) 33 100.0% -0.43 [-0.92, 0.06]  Heterogeneity: Not applicable  Test for overall effect: Z = 1.72 (P = 0.08)  8.1.5 Kinesiotape plus NSAID versus NSAID  Sahin 2016 34.8 5.7 33 13.6 2.3 33 100.0% 4.82 [3.84, 5.80]  Heterogeneity: Not applicable  Test for overall effect: Z = 9.68 (P < 0.00001)  | Heterogeneity: Tau <sup>2</sup> = | = 0.27; Chi | <sup>2</sup> = 14.63, | df = 4  | (P = 0.00) | 6); I <sup>2</sup> = 73 <sup>9</sup> | %     |         |                      |  |
| Göksu 2015 132.2 21.08 30 142.9 16.11 31 48.5% -0.56 [-1.08, -0.05] Subasi 2014 166.1 14.5 35 165.4 21.7 35 51.5% 0.04 [-0.43, 0.51] Subtotal (95% CI) 65 66 100.0% -0.25 [-0.84, 0.34] Heterogeneity: Tau² = 0.12; Chi² = 2.89, df = 1 (P = 0.09); l² = 65% Test for overall effect: Z = 0.84 (P = 0.40)  8.1.4 Kinesiotape plus NSAID versus Corticosteroid plus NSAID Sahin 2016 34.8 5.7 33 37.3 5.8 33 100.0% -0.43 [-0.92, 0.06] Subtotal (95% CI) 33 100.0% -0.43 [-0.92, 0.06] Heterogeneity: Not applicable Test for overall effect: Z = 1.72 (P = 0.08)  8.1.5 Kinesiotape plus NSAID versus NSAID Sahin 2016 34.8 5.7 33 13.6 2.3 33 100.0% 4.82 [3.84, 5.80] Heterogeneity: Not applicable Test for overall effect: Z = 9.68 (P < 0.00001)  | Test for overall effect           | : Z = 1.07  | (P = 0.28)            |         |            |                                      |       |         |                      |  |
| Subasi 2014 166.1 14.5 35 165.4 21.7 35 51.5% 0.04 [-0.43, 0.51] Subtotal (95% CI) 65 65 66 100.0% -0.25 [-0.84, 0.34]  Heterogeneity: Tau² = 0.12; Chi² = 2.89, df = 1 (P = 0.09); l² = 65% Test for overall effect: Z = 0.84 (P = 0.40)  8.1.4 Kinesiotape plus NSAID versus Corticosteroid plus NSAID  Sahin 2016 34.8 5.7 33 37.3 5.8 33 100.0% -0.43 [-0.92, 0.06] Subtotal (95% CI) 33 3100.0% -0.43 [-0.92, 0.06]  Heterogeneity: Not applicable Test for overall effect: Z = 1.72 (P = 0.08)  8.1.5 Kinesiotape plus NSAID versus NSAID  Sahin 2016 34.8 5.7 33 13.6 2.3 33 100.0% 4.82 [3.84, 5.80]  Subtotal (95% CI) 33 3100.0% 4.82 [3.84, 5.80]  Heterogeneity: Not applicable Test for overall effect: Z = 9.68 (P < 0.00001)   | 8.1.3 Tape and Exer               | cise versu  | ıs Cortico            | steroi  | ds and E   | xercise                              |       |         |                      |  |
| Subtotal (95% CI) 65 66 100.0% -0.25 [-0.84, 0.34]  Heterogeneity: Tau² = 0.12; Chi² = 2.89, df = 1 (P = 0.09); I² = 65%  Test for overall effect: Z = 0.84 (P = 0.40)  8.1.4 Kinesiotape plus NSAID versus Corticosteroid plus NSAID  Sahin 2016 34.8 5.7 33 37.3 5.8 33 100.0% -0.43 [-0.92, 0.06]  Subtotal (95% CI) 33 100.0% -0.43 [-0.92, 0.06]  Heterogeneity: Not applicable  Test for overall effect: Z = 1.72 (P = 0.08)  8.1.5 Kinesiotape plus NSAID versus NSAID  Sahin 2016 34.8 5.7 33 13.6 2.3 33 100.0% 4.82 [3.84, 5.80]  Subtotal (95% CI) 33 300.0% 4.82 [3.84, 5.80]  Heterogeneity: Not applicable  Test for overall effect: Z = 9.68 (P < 0.00001)   | Göksu 2015                        | 132.2       | 21.08                 | 30      | 142.9      | 16.11                                | 31    | 48.5%   | -0.56 [-1.08, -0.05] | -  |
| Heterogeneity: Tau² = 0.12; Chi² = 2.89, df = 1 (P = 0.09);  ² = 65% Test for overall effect: Z = 0.84 (P = 0.40)  8.1.4 Kinesiotape plus NSAID versus Corticosteroid plus NSAID Sahin 2016 34.8 5.7 33 37.3 5.8 33 100.0% -0.43 [-0.92, 0.06] Subtotal (95% CI) 33 100.0% -0.43 [-0.92, 0.06] Heterogeneity: Not applicable Test for overall effect: Z = 1.72 (P = 0.08)  8.1.5 Kinesiotape plus NSAID versus NSAID Sahin 2016 34.8 5.7 33 13.6 2.3 33 100.0% 4.82 [3.84, 5.80] Subtotal (95% CI) 33 3 100.0% 4.82 [3.84, 5.80] Heterogeneity: Not applicable Test for overall effect: Z = 9.68 (P < 0.00001)  |                                   | 166.1       | 14.5                  |         | 165.4      | 21.7                                 |       |         |                      | _  |
| Test for overall effect: Z = 0.84 (P = 0.40)  8.1.4 Kinesiotape plus NSAID versus Corticosteroid plus NSAID  Sahin 2016   | , ,                               |             |                       |         |            |                                      | 66    | 100.0%  | -0.25 [-0.84, 0.34]  |  |
| Sahin 2016 34.8 5.7 33 37.3 5.8 33 100.0% -0.43 [-0.92, 0.06] Subtotal (95% CI) 33 100.0% -0.43 [-0.92, 0.06] Heterogeneity: Not applicable Test for overall effect: Z = 1.72 (P = 0.08)  8.1.5 Kinesiotape plus NSAID versus NSAID Sahin 2016 34.8 5.7 33 13.6 2.3 33 100.0% 4.82 [3.84, 5.80] Subtotal (95% CI) 33 100.0% 4.82 [3.84, 5.80] Heterogeneity: Not applicable Test for overall effect: Z = 9.68 (P < 0.00001)   | 0 ,                               |             |                       |         | P = 0.09); | I <sup>2</sup> = 65%                 |       |         |                      |  |
| Subtotal (95% CI) 33 3 100.0% -0.43 [-0.92, 0.06]  Heterogeneity: Not applicable Test for overall effect: Z = 1.72 (P = 0.08)  8.1.5 Kinesiotape plus NSAID versus NSAID Sahin 2016 34.8 5.7 33 13.6 2.3 33 100.0% 4.82 [3.84, 5.80] Subtotal (95% CI) 33 100.0% 4.82 [3.84, 5.80]  Heterogeneity: Not applicable Test for overall effect: Z = 9.68 (P < 0.00001)   | 8.1.4 Kinesiotape pl              | us NSAID    | versus C              | orticos | steroid p  | lus NSAID                            | )     |         |                      | _  |
| Heterogeneity: Not applicable Test for overall effect: Z = 1.72 (P = 0.08)  8.1.5 Kinesiotape plus NSAID versus NSAID Sahin 2016 34.8 5.7 33 13.6 2.3 33 100.0% 4.82 [3.84, 5.80] Subtotal (95% CI) 33 100.0% 4.82 [3.84, 5.80] Heterogeneity: Not applicable Test for overall effect: Z = 9.68 (P < 0.00001)   | Sahin 2016                        | 34.8        | 5.7                   | 33      | 37.3       | 5.8                                  |       |         |                      | <del>-                                    </del> |
| Test for overall effect: Z = 1.72 (P = 0.08)  8.1.5 Kinesiotape plus NSAID versus NSAID  Sahin 2016   | Subtotal (95% CI)                 |             |                       | 33      |            |                                      | 33    | 100.0%  | -0.43 [-0.92, 0.06]  | •  |
| 8.1.5 Kinesiotape plus NSAID versus NSAID Sahin 2016  | Heterogeneity: Not ap             | pplicable   |                       |         |            |                                      |       |         |                      |  |
| Sahin 2016 34.8 5.7 33 13.6 2.3 33 100.0% 4.82 [3.84, 5.80] Subtotal (95% CI) 33 100.0% 4.82 [3.84, 5.80] Heterogeneity: Not applicable Test for overall effect: Z = 9.68 (P < 0.00001)   | Test for overall effect           | : Z = 1.72  | (P = 0.08)            |         |            |                                      |       |         |                      |  |
| Subtotal (95% CI) 33 33 100.0% 4.82 [3.84, 5.80]  Heterogeneity: Not applicable  Test for overall effect: Z = 9.68 (P < 0.00001)  | 8.1.5 Kinesiotape pl              | us NSAID    | versus N              | SAID    |            |                                      |       |         |                      | <u></u>  |
| Heterogeneity: Not applicable Test for overall effect: Z = 9.68 (P < 0.00001)  -4 -2 0 2 4  | Sahin 2016                        | 34.8        | 5.7                   |         | 13.6       | 2.3                                  | 33    | 100.0%  | 4.82 [3.84, 5.80]    | _ <b></b> →                                      |
| Test for overall effect: Z = 9.68 (P < 0.00001)  -4 -2 0 2 4  | Subtotal (95% CI)                 |             |                       | 33      |            |                                      | 33    | 100.0%  | 4.82 [3.84, 5.80]    |  |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$   | Heterogeneity: Not ap             | pplicable   |                       |         |            |                                      |       |         |                      |  |
| · - · ·   | Test for overall effect           | : Z = 9.68  | (P < 0.000)           | 001)    |            |                                      |       |         |                      |  |
| · - · ·   |                                   |             |                       |         |            |                                      |       |         |                      |  |
| · - · ·   |                                   |             |                       |         |            |                                      |       |         | -                    | -4 -2 0 2 4                                      |
|   |                                   |             |                       |         |            |                                      |       |         |                      |  |

Figure Appendix-4c 15. Tape: Outcome AROM at the longest follow-up

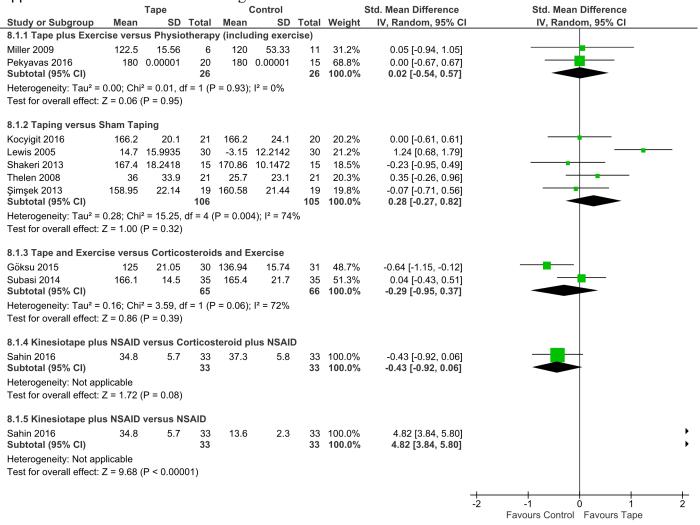


Figure Appendix-4c 16. Tape: Outcome AROM at the shortest follow-up

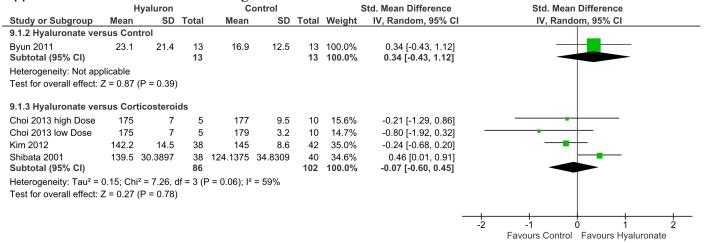


Figure Appendix-4c 17. Hyaluronate: Outcome AROM at the longest follow-up

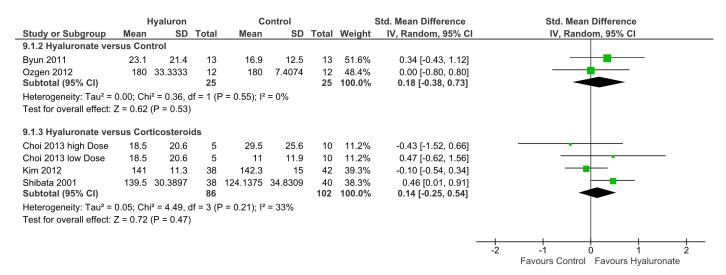


Figure Appendix-4c 18. Hyaluronate: Outcome AROM at the shortest follow-up

|                                   | Exp      | periment    | al          |         | Control                 |       |        | Mean Difference     | Mean Difference              |
|-----------------------------------|----------|-------------|-------------|---------|-------------------------|-------|--------|---------------------|------------------------------|
| Study or Subgroup                 | Mean     | SD          | Total       | Mean    | SD                      | Total | Weight | IV, Random, 95% CI  | IV, Random, 95% CI           |
| 10.1.1 PEMF versus                | Sham P   | EMF         |             |         |                         |       |        |                     |                              |
| Aktas 2007                        | 35.9     | 6.91        | 20          | 36.7    | 3.13                    | 20    | 58.2%  | -0.80 [-4.12, 2.52] | <del></del>                  |
| de Freitas 2013                   | 24       | 10.646      | 26          | 19.7    | 9.1054                  | 30    | 41.8%  | 4.30 [-0.93, 9.53]  | <del></del>                  |
| Subtotal (95% CI)                 |          |             | 46          |         |                         | 50    | 100.0% | 1.33 [-3.60, 6.26]  |                              |
| Heterogeneity: Tau <sup>2</sup> = | 8.01; Cl | ni² = 2.60  | ), $df = 1$ | (P = 0. | 11); I <sup>2</sup> = ( | 62%   |        |                     |                              |
| Test for overall effect:          | Z = 0.53 | 8 (P = 0.6) | iO)         |         |                         |       |        |                     |                              |
|                                   |          |             |             |         |                         |       |        |                     |                              |
|                                   |          |             |             |         |                         |       |        | _                   | -4 -2 0 2 4                  |
|                                   |          |             |             |         |                         |       |        |                     | Favours Control Favours PEMF |

Figure Appendix-4c 19. PEMF: Outcome AROM at the longest follow-up

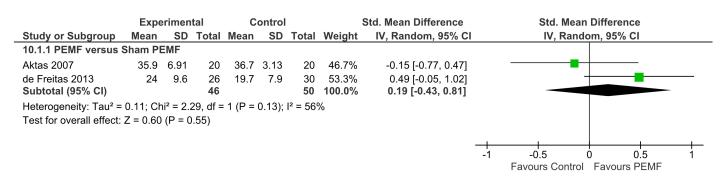


Figure Appendix-4c 20. PEMF: Outcome AROM at the shortest follow-up

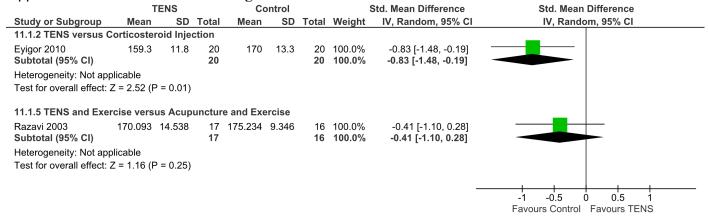


Figure Appendix-4c 21. TENS: Outcome AROM at the longest follow-up

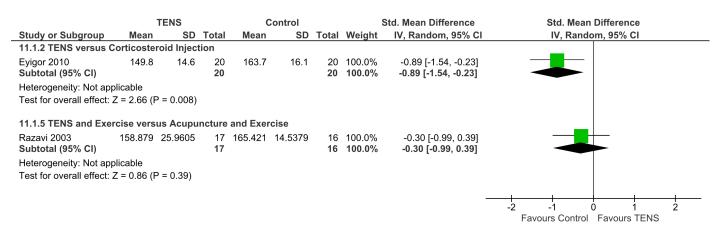


Figure Appendix-4c 22. TENS: Outcome AROM at the shortest follow-up

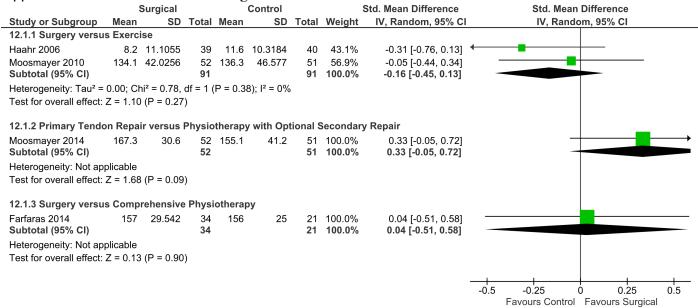


Figure Appendix-4c 23. Surgery: Outcome AROM at the longest follow-up

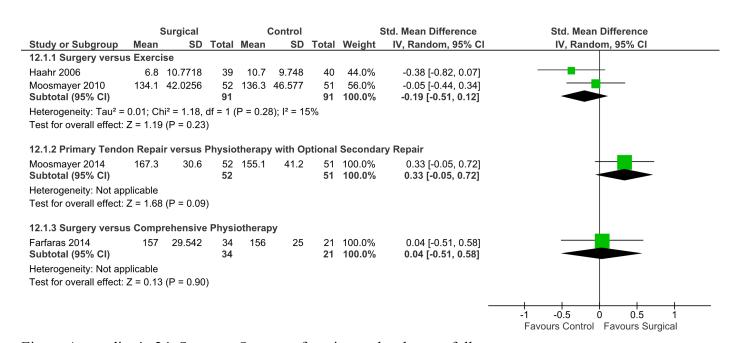


Figure Appendix-4c 24. Surgery: Outcome function at the shortest follow-up

|   | EX   | perimenta | II     |          | Control |       | ,      | Sta. Mean Difference | Std. Mean Difference                                |
|---|------|-----------|--------|----------|---------|-------|--------|----------------------|---|
| Study or Subgroup   | Mean | SD        | Total  | Mean     | SD      | Total | Weight | IV, Random, 95% CI   | IV, Random, 95% CI                                  |
| Bayram 2014   | 35.6 | 5.7       | 38     | 33.2     | 7.5     | 36    | 85.8%  | 0.36 [-0.10, 0.82]   | <del></del>   |
| Vecchio 1993 NerveBlock   | 39   | 37.9473   | 10     | 10       | 15.6525 | 5     | 14.2%  | 0.83 [-0.29, 1.96]   | <del>-</del>  |
| Total (95% CI)  |      |           | 48     |          |         | 41    | 100.0% | 0.43 [-0.00, 0.85]   |   |
| Heterogeneity: Tau <sup>2</sup> = 0.00;<br>Test for overall effect: Z = 1 |      |           | (P = 0 | .44); l² | = 0%    |       |        |                      | -1 -0.5 0 0.5 1 Favours Control Favours Nerve Block |

Figure Appendix-4c 25. Nerve block: Outcome AROM at the longest follow-up

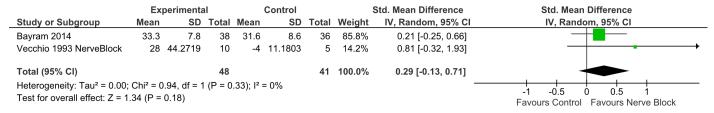


Figure Appendix-4c 26. Nerve block: Outcome AROM at the shortest follow-up

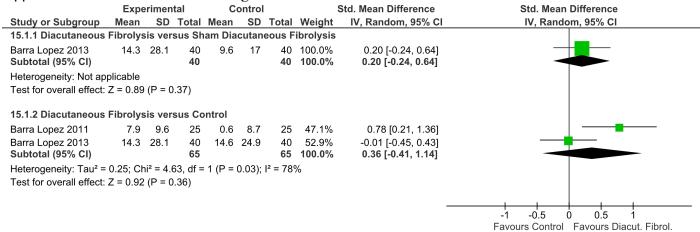


Figure Appendix-4c 27. Diacutaneous Fibrolysis: Outcome AROM at the longest follow-up

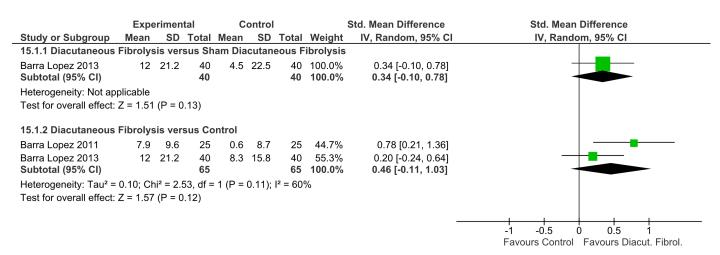


Figure Appendix-4c 28. Diacutaneous Fibrolysis: Outcome AROM at the shortest follow-up

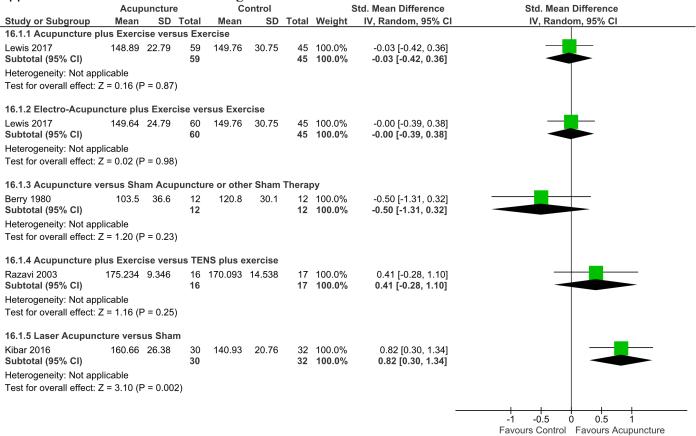


Figure Appendix-4c 29. Acupuncture: Outcome AROM at the longest follow-up

| Acupuncture                                       |               |          |                 | C           | Control   |       |                          | Std. Mean Difference                               | Std. Mean Difference                |  |  |
|---|---------------|----------|-----------------|-------------|-----------|-------|--------------------------|--|-------------------------------------|--|--|
| Study or Subgroup                                 | Mean          | SD       | Total           | Mean        | SD        | Total | Weight                   | IV, Random, 95% CI                                 | IV, Random, 95% CI                  |  |  |
| 16.1.1 Acupuncture                                | olus Exercise | e versus | Exerci          | se          |           |       |                          |  |                                     |  |  |
| Lewis 2017<br>Subtotal (95% CI)                   | 130.51        | 32.59    | 68<br><b>68</b> | 126.94      | 36.49     |       | 100.0%<br><b>100.0</b> % | 0.10 [-0.25, 0.46]<br><b>0.10 [-0.25, 0.46</b> ]   | -                                   |  |  |
| Heterogeneity: Not ap                             | plicable      |          |                 |             |           |       |                          |  |                                     |  |  |
| Test for overall effect:                          | Z = 0.57 (P = | 0.57)    |                 |             |           |       |                          |  |                                     |  |  |
| 16.1.2 Electro-Acupu                              | ıncture plus  | Exercise | versu           | s Exercise  |           |       |                          |  |                                     |  |  |
| Lewis 2017<br>Subtotal (95% CI)                   | 131.91        | 30.97    | 69<br><b>69</b> | 126.94      | 36.49     |       | 100.0%<br><b>100.0</b> % | 0.15 [-0.20, 0.50]<br><b>0.15 [-0.20, 0.50</b> ]   | <b>*</b>                            |  |  |
| Heterogeneity: Not ap<br>Test for overall effect: |               | = 0.41)  |                 |             |           |       |                          |  |                                     |  |  |
| 16.1.3 Acupuncture                                | versus Sham   | Acupun   | cture           | or other Sh | am Therap | у     |                          |  |                                     |  |  |
| Berry 1980<br>Subtotal (95% CI)                   | 103.5         | 36.6     | 12<br><b>12</b> | 120.8       | 30.1      |       | 100.0%<br><b>100.0</b> % | -0.50 [-1.31, 0.32]<br><b>-0.50 [-1.31, 0.32</b> ] |                                     |  |  |
| Heterogeneity: Not ap                             | plicable      |          |                 |             |           |       |                          |  |                                     |  |  |
| Test for overall effect:                          | Z = 1.20 (P = | 0.23)    |                 |             |           |       |                          |  |                                     |  |  |
| 16.1.4 Acupuncture                                | plus Exercise | e versus | TENS            | plus exerci | ise       |       |                          |  | _                                   |  |  |
| Razavi 2003<br>Subtotal (95% CI)                  | 165.4206      | 14.5379  | 16<br><b>16</b> | 158.8785    | 25.96054  |       | 100.0%<br><b>100.0</b> % | 0.30 [-0.39, 0.99]<br><b>0.30 [-0.39, 0.99]</b>    |                                     |  |  |
| Heterogeneity: Not ap                             | •             |          |                 |             |           |       |                          |  |                                     |  |  |
| Test for overall effect:                          | Z = 0.86 (P = | = 0.39)  |                 |             |           |       |                          |  |                                     |  |  |
| 16.1.5 Laser Acupun                               | cture versus  | Sham     |                 |             |           |       |                          |  |                                     |  |  |
| Kibar 2016<br>Subtotal (95% CI)                   | 160.66        | 26.38    | 30<br><b>30</b> | 140.93      | 20.76     |       | 100.0%<br><b>100.0%</b>  | 0.82 [0.30, 1.34]<br><b>0.82 [0.30, 1.34</b> ]     |                                     |  |  |
| Heterogeneity: Not ap                             | plicable      |          |                 |             |           |       |                          |  |                                     |  |  |
| Test for overall effect:                          | Z = 3.10 (P = | 0.002)   |                 |             |           |       |                          |  |                                     |  |  |
|   |               |          |                 |             |           |       |                          | _  | <u> </u>                            |  |  |
|   |               |          |                 |             |           |       |                          |  | -1 -0.5 0 0.5 1                     |  |  |
|   |               |          |                 |             |           |       |                          |  | Favours Control Favours Acupuncture |  |  |

Figure Appendix-4c 30. Acupuncture: Outcome AROM at the shortest follow-up

| Experimental                                      |      |        |         | Control |      |       |        | Std. Mean Difference | Std. Mean Difference |                |                |                 |             |
|---|------|--------|---------|---------|------|-------|--------|----------------------|----------------------|----------------|----------------|-----------------|-------------|
| Study or Subgroup                                 | Mean | SD     | Total   | Mean    | SD   | Total | Weight | IV, Random, 95% CI   |                      | IV, Ra         | ndom, 95       | 5% CI           |             |
| Akyol 2012  | 33.5 | 3.75   | 20      | 23.5    | 2.74 | 20    | 100.0% | 2.98 [2.06, 3.91]    |                      |                |                | _               | —           |
| Total (95% CI)                                    |      |        | 20      |         |      | 20    | 100.0% | 2.98 [2.06, 3.91]    |                      |                |                | <b>4</b>        | <b>&gt;</b> |
| Heterogeneity: Not ap<br>Test for overall effect: | •    | (P < 0 | 0.00001 | )       |      |       |        | -                    | -4<br>Fav            | -2<br>ours Con | 0<br>trol Favo | 2<br>ours Micro | 4<br>owave  |

Figure Appendix-4c 31. Microwave: Outcome AROM at the longest follow-up

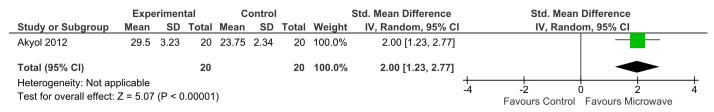


Figure Appendix-4c 32. Microwave: Outcome AROM at the shortest follow-up

|   | Experimental    |        |       | C     | Control |  |        | Std. Mean Difference | Std. Mean Difference |  |  |  |  |
|---|-----------------|--------|-------|-------|---------|--|--------|----------------------|----------------------|--|--|--|--|
| Study or Subgroup                                 | Mean SD Total N |        | Mean  | SD    | Total   | Weight IV, Random, 95% CI                            |        | IV, Random, 95% CI   |                      |  |  |  |  |
| Barra-Lopez 2015                                  | 23.11           | 17.2   | 19    | 17.63 | 19.62   | 19   | 100.0% | 0.29 [-0.35, 0.93]   | <del></del>          |  |  |  |  |
| Total (95% CI)                                    |                 |        | 19    |       |         | 19   | 100.0% | 0.29 [-0.35, 0.93]   |                      |  |  |  |  |
| Heterogeneity: Not ap<br>Test for overall effect: | •               | (P = 0 | ).37) |       | •       | -1 -0.5 0 0.5 1 Favours Control Favours Experimental |        |                      |                      |  |  |  |  |

Figure Appendix-4c 33. Myofascial Trigger Point Interventions: Outcome AROM at the longest follow-up

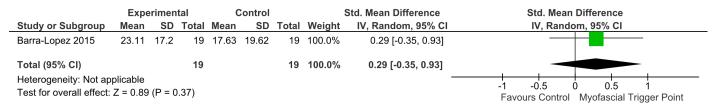


Figure Appendix-4c 34. Myofascial Trigger Point Interventions: Outcome AROM at the longest follow-up

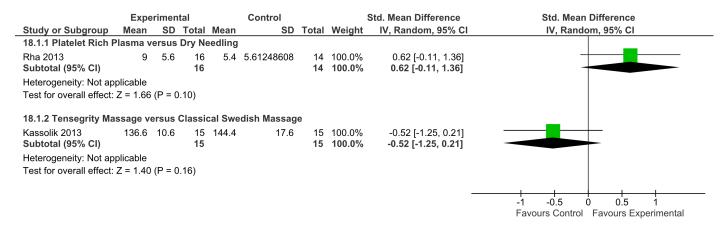


Figure Appendix-4c 35. Miscellaneous interventions: Outcome AROM at the longest follow-up

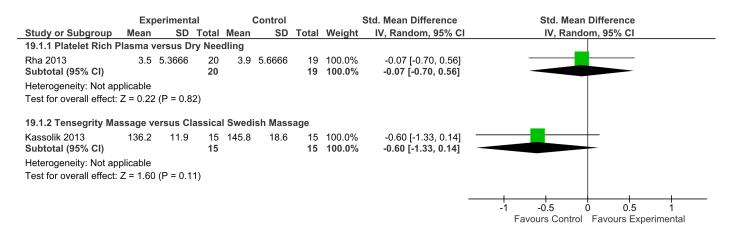


Figure Appendix-4c 36. Miscellaneous interventions: Outcome AROM at the longest follow-up