Table S1: Baseline characteristics of participants who responded at each follow-up time point

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Baseline</th>
<th>3-months</th>
<th>6-months</th>
<th>12-months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=257</td>
<td>N=232</td>
<td>N=218</td>
<td>N=219</td>
</tr>
<tr>
<td>Demographic data</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>16 (6)</td>
<td>12 (5)</td>
<td>13 (6)</td>
<td>14 (6)</td>
</tr>
<tr>
<td>B</td>
<td>39 (15)</td>
<td>36 (16)</td>
<td>33 (15)</td>
<td>34 (16)</td>
</tr>
<tr>
<td>C</td>
<td>67 (26)</td>
<td>63 (27)</td>
<td>63 (29)</td>
<td>60 (27)</td>
</tr>
<tr>
<td>D</td>
<td>62 (24)</td>
<td>56 (24)</td>
<td>53 (24)</td>
<td>53 (24)</td>
</tr>
<tr>
<td>E</td>
<td>73 (28)</td>
<td>65 (28)</td>
<td>56 (26)</td>
<td>58 (26)</td>
</tr>
<tr>
<td>Mean (SD): Age (years)</td>
<td>65.8 (9.1)</td>
<td>66.4 (9.2)</td>
<td>66.2 (9.1)</td>
<td>65.6 (9.0)</td>
</tr>
<tr>
<td>Female</td>
<td>170 (66)</td>
<td>152 (66)</td>
<td>147 (67)</td>
<td>149 (68)</td>
</tr>
<tr>
<td>Married</td>
<td>165 (65)</td>
<td>145 (63)</td>
<td>140 (65)</td>
<td>138 (64)</td>
</tr>
<tr>
<td>Routine or manual occupation*†</td>
<td>121 (47)</td>
<td>107 (46)</td>
<td>96 (44)</td>
<td>103 (47)</td>
</tr>
<tr>
<td>Currently working</td>
<td>76 (30)</td>
<td>64 (28)</td>
<td>60 (28)</td>
<td>64 (29)</td>
</tr>
<tr>
<td>Mean (SD): Age when left school</td>
<td>16 (1.2)</td>
<td>16 (1.2)</td>
<td>16 (1.2)</td>
<td>16 (1.2)</td>
</tr>
<tr>
<td>Left school to go to full time education or university</td>
<td>41 (16)</td>
<td>37 (16)</td>
<td>37 (17)</td>
<td>35 (16)</td>
</tr>
<tr>
<td>Gained qualifications through study as an adult</td>
<td>126 (50)</td>
<td>113 (50)</td>
<td>111 (52)</td>
<td>112 (52)</td>
</tr>
<tr>
<td>General health and quality of life</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body mass index &gt;=25.0 kg/m² (overweight/obese)‡</td>
<td>169 (68)</td>
<td>150 (67)</td>
<td>143 (68)</td>
<td>143 (68)</td>
</tr>
<tr>
<td>Mean (SD): SF-12: Physical component (0-100)</td>
<td>40.1 (10.7)</td>
<td>40.1 (10.7)</td>
<td>40.1 (10.7)</td>
<td>40.5 (10.6)</td>
</tr>
<tr>
<td>Median (IQR): SF-12: Mental component (0-100)</td>
<td>53.4 (43.3, 59.2)</td>
<td>53.8 (44.5, 59.3)</td>
<td>53.8 (44.0, 59.3)</td>
<td>53.7 (43.9, 59.4)</td>
</tr>
<tr>
<td>Clinical characteristics of hand problem</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain in both hands in last 12 months</td>
<td>225 (88)</td>
<td>202 (87)</td>
<td>193 (89)</td>
<td>195 (89)</td>
</tr>
<tr>
<td>Median (IQR): Number of years with hand problem*</td>
<td>5.0 (2.0, 10.0)</td>
<td>5.0 (2.0, 10.0)</td>
<td>5.0 (2.0, 10.0)</td>
<td>5.0 (2.0, 10.0)</td>
</tr>
<tr>
<td>Mean (SD): AUSCAN - pain (0-20)*</td>
<td>9.4 (3.6)</td>
<td>9.3 (3.7)</td>
<td>9.3 (3.6)</td>
<td>9.4 (3.6)</td>
</tr>
<tr>
<td>Mean (SD): AUSCAN - stiffness (0-4)*</td>
<td>1.5 (1.0)</td>
<td>1.5 (1.0)</td>
<td>1.5 (1.1)</td>
<td>1.5 (1.0)</td>
</tr>
<tr>
<td>Mean (SD): AUSCAN - function (0-36)*</td>
<td>14.8 (7.6)</td>
<td>14.6 (7.6)</td>
<td>14.8 (7.5)</td>
<td>14.7 (7.4)</td>
</tr>
<tr>
<td>Mean (SD): AUSCAN - total (0-12)*</td>
<td>5.0 (2.2)</td>
<td>5.0 (2.2)</td>
<td>5.0 (2.2)</td>
<td>5.0 (2.2)</td>
</tr>
<tr>
<td>Mean (SD): Arthritis self-efficacy pain subscale (1-10)*</td>
<td>5.1 (1.8)</td>
<td>5.1 (1.8)</td>
<td>5.1 (1.8)</td>
<td>5.1 (1.8)</td>
</tr>
<tr>
<td>Mean (SD): Hand pain severity on average last 3 days (0-10)</td>
<td>4.6 (2.0)</td>
<td>4.6 (2.0)</td>
<td>4.6 (2.0)</td>
<td>4.6 (2.0)</td>
</tr>
<tr>
<td>Mean (SD): Severity of main functional problem, on average, last 3 days (0-10)*</td>
<td>5.0 (2.4)</td>
<td>5.0 (2.4)</td>
<td>5.1 (2.4)</td>
<td>5.1 (2.4)</td>
</tr>
<tr>
<td>Mean (SD): Satisfaction with hand function last 3 days (0-10)*</td>
<td>4.8 (2.3)</td>
<td>4.8 (2.3)</td>
<td>4.8 (2.3)</td>
<td>4.8 (2.2)</td>
</tr>
<tr>
<td>Median (IQR): Grip strength (lbs)</td>
<td>33.5 (22.5, 47.5)</td>
<td>33.5 (22.5, 48.0)</td>
<td>32.5 (22.0, 47.5)</td>
<td>32.5 (21.5, 47.5)</td>
</tr>
<tr>
<td></td>
<td>Mean (SD)</td>
<td>Median (IQR)</td>
<td>ACR criteria met</td>
<td>Unilateral or bilateral thumb OA</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------</td>
<td>--------------</td>
<td>-----------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Pinch strength (lbs)</td>
<td>8.9 (3.4)</td>
<td>9.0 (3.4)</td>
<td>8.9 (3.4)</td>
<td>8.9 (3.4)</td>
</tr>
<tr>
<td>Median (IQR): Grip ability test (seconds)</td>
<td>32.0 (26.5, 40.4)</td>
<td>32.1 (26.5, 40.7)</td>
<td>32.1 (26.0, 41.5)</td>
<td>32.1 (26.4, 41.3)</td>
</tr>
<tr>
<td>ACR criteria met</td>
<td>230 (90)</td>
<td>208 (90)</td>
<td>195 (89)</td>
<td>194 (89)</td>
</tr>
<tr>
<td>Unilateral or bilateral thumb OA</td>
<td>210 (82)</td>
<td>193 (83)</td>
<td>182 (84)</td>
<td>183 (84)</td>
</tr>
</tbody>
</table>

Figures are numbers and percentages unless otherwise stated. Median (IQR) given for outcome measures with a skewed distribution. Total AUSCAN score calculated as (pain/5) + stiffness + (function/9). Abbreviations: SF-12 = Short Form Health Survey 12 (version 2), AUSCAN = Australian/Canadian Hand Osteoarthritis Index, ACR = American College of Rheumatology, OA = osteoarthritis. * = Data based on imputed data; † = Based on the “lower supervisory/technical”, “Semi-routine” and “Routine” groups of the UK Standard Occupation Classification (2000) for current or most recent paid employment; ‡ = Body mass index grouping defined according to the World Health Organisation (WHO); § = ACR criteria based on clinical features only (symptom frequency assessed prior to clinical assessment); || = Responding is defined as participants who return the self-complete questionnaire or complete minimum data at the respective time point.
Table S2: Interaction effects for the primary outcome measure

<table>
<thead>
<tr>
<th>OARSI responder criteria</th>
<th>3-months</th>
<th>6-months</th>
<th>12-months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N (%)</td>
<td>Interaction coefficient (95% CI)</td>
<td>N (%)</td>
</tr>
<tr>
<td>Leaflet and advice (L&amp;A)</td>
<td>8 (12)</td>
<td>0.29 (0.07, 1.25)</td>
<td>14 (22)</td>
</tr>
<tr>
<td>Joint protection (JP)</td>
<td>16 (26)</td>
<td>0.29</td>
<td>17 (28)</td>
</tr>
<tr>
<td>Hand Exercises (HEx)</td>
<td>15 (23)</td>
<td>(0.07, 1.25)</td>
<td>13 (20)</td>
</tr>
<tr>
<td>Combined therapy (JP&amp;HEx)</td>
<td>11 (17)</td>
<td>14 (22)</td>
<td>24 (37)</td>
</tr>
</tbody>
</table>

Descriptive statistics based on unadjusted imputed data; interaction coefficients on adjusted imputed data (i.e. adjusted for age, gender, social class, length of time with a hand condition, general practice and the two main effects of interest). Interaction coefficients are odds ratios from logistic regression models; confidence intervals containing one are non-significant interactions. Abbreviations: CI = confidence interval.
Table S3: Frequencies of the global assessment of change question (percentages estimated from imputed data)

<table>
<thead>
<tr>
<th>Global assessment of change</th>
<th>No JP N=130</th>
<th>JP N=127</th>
<th>No HEx N=127</th>
<th>HEx N=130</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3-months</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completely better/much better</td>
<td>10 (8)</td>
<td>9 (7)</td>
<td>9 (7)</td>
<td>10 (8)</td>
</tr>
<tr>
<td>Better</td>
<td>29 (22)</td>
<td>36 (28)</td>
<td>20 (16)</td>
<td>43 (33)</td>
</tr>
<tr>
<td>No change</td>
<td>61 (47)</td>
<td>66 (52)</td>
<td>74 (58)</td>
<td>53 (41)</td>
</tr>
<tr>
<td>Worse/much worse</td>
<td>29 (22)</td>
<td>18 (14)</td>
<td>23 (18)</td>
<td>23 (18)</td>
</tr>
<tr>
<td><strong>6-months</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completely better/much better</td>
<td>9 (7)</td>
<td>11 (9)</td>
<td>6 (5)</td>
<td>14 (11)</td>
</tr>
<tr>
<td>Better</td>
<td>21 (16)</td>
<td>39 (31)</td>
<td>20 (16)</td>
<td>39 (30)</td>
</tr>
<tr>
<td>No change</td>
<td>62 (48)</td>
<td>55 (43)</td>
<td>69 (54)</td>
<td>48 (37)</td>
</tr>
<tr>
<td>Worse/much worse</td>
<td>38 (29)</td>
<td>20 (16)</td>
<td>32 (25)</td>
<td>27 (21)</td>
</tr>
<tr>
<td><strong>12-months</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completely better/much better</td>
<td>10 (8)</td>
<td>13 (10)</td>
<td>9 (7)</td>
<td>14 (11)</td>
</tr>
<tr>
<td>Better</td>
<td>23 (18)</td>
<td>33 (26)</td>
<td>20 (16)</td>
<td>36 (28)</td>
</tr>
<tr>
<td>No change</td>
<td>47 (36)</td>
<td>48 (38)</td>
<td>55 (43)</td>
<td>40 (31)</td>
</tr>
<tr>
<td>Worse/much worse</td>
<td>49 (38)</td>
<td>33 (26)</td>
<td>43 (34)</td>
<td>39 (30)</td>
</tr>
</tbody>
</table>

Figures are number (percentages).
JP = joint protection, HEx = hand exercise
Supplementary Table S4: Treatment fidelity

<table>
<thead>
<tr>
<th></th>
<th>3-months</th>
<th>6-months</th>
<th>12-months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No HEx</td>
<td>HEx</td>
<td>No HEx</td>
</tr>
<tr>
<td><strong>Hand exercise fidelity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last week, frequency of completion of a structured exercise program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>47 (43)</td>
<td>11 (10)</td>
<td>46 (44)</td>
</tr>
<tr>
<td>Almost never</td>
<td>16 (15)</td>
<td>2 (2)</td>
<td>18 (17)</td>
</tr>
<tr>
<td>Sometimes</td>
<td>26 (24)</td>
<td>23 (20)</td>
<td>27 (26)</td>
</tr>
<tr>
<td>Fairly often</td>
<td>11 (10)</td>
<td>35 (30)</td>
<td>6 (6)</td>
</tr>
<tr>
<td>Very often</td>
<td>7 (6)</td>
<td>38 (33)</td>
<td>4 (4)</td>
</tr>
<tr>
<td>Always</td>
<td>3 (3)</td>
<td>6 (5)</td>
<td>3 (3)</td>
</tr>
<tr>
<td><strong>Chi-square (χ²)1 (d.f.=4)</strong></td>
<td>χ² = 67.3; p &lt;0.001</td>
<td>χ² = 50.6; p &lt;0.001</td>
<td>χ² = 29.5; p &lt;0.001</td>
</tr>
<tr>
<td>Last month, number of times a week done exercises specifically designed for hand problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>α</td>
<td>α</td>
<td>38 (37)</td>
</tr>
<tr>
<td>Once a week</td>
<td>α</td>
<td>α</td>
<td>11 (11)</td>
</tr>
<tr>
<td>Twice a week</td>
<td>α</td>
<td>α</td>
<td>3 (3)</td>
</tr>
<tr>
<td>Three times a week</td>
<td>α</td>
<td>α</td>
<td>6 (6)</td>
</tr>
<tr>
<td>Four times a week</td>
<td>α</td>
<td>α</td>
<td>7 (6)</td>
</tr>
<tr>
<td>Five times a week</td>
<td>α</td>
<td>α</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Six times a week</td>
<td>α</td>
<td>α</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Once every day</td>
<td>α</td>
<td>α</td>
<td>19 (18)</td>
</tr>
<tr>
<td>Twice every day</td>
<td>α</td>
<td>α</td>
<td>17 (16)</td>
</tr>
<tr>
<td><strong>Chi-square(χ²)2 (d.f.=4)</strong></td>
<td>χ² = 25.6; p &lt;0.001</td>
<td>χ² = 34.2; p &lt;0.001</td>
<td></td>
</tr>
<tr>
<td>When doing hand exercises, how long do you spend doing them?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 5 minutes</td>
<td>α</td>
<td>α</td>
<td>44 (43)</td>
</tr>
<tr>
<td>Five minutes to less than ten minutes</td>
<td>α</td>
<td>α</td>
<td>24 (24)</td>
</tr>
<tr>
<td>Ten minutes to less than fifteen minutes</td>
<td>α</td>
<td>α</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Fifteen minutes to less than an hour</td>
<td>α</td>
<td>α</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Half an hour or more</td>
<td>α</td>
<td>α</td>
<td>1 (1)</td>
</tr>
<tr>
<td>I don’t do hand exercises</td>
<td>α</td>
<td>α</td>
<td>30 (29)</td>
</tr>
<tr>
<td><strong>Chi-square(χ²)3 (d.f.=3)</strong></td>
<td>χ² = 25.8; p &lt;0.001</td>
<td>χ² = 25.1; p &lt;0.001</td>
<td></td>
</tr>
<tr>
<td><strong>Joint protection fidelity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------</td>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>Energy conservation/fatigue (1-6)[13,22]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>114</td>
<td>110</td>
<td>107</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>3.4 (1.2)</td>
<td>3.9 (1.0)</td>
<td>3.4 (1.1)</td>
</tr>
<tr>
<td>Adjusted(^5) mean difference (95% CI)</td>
<td>0.40 (0.17, 0.63)</td>
<td>0.46 (0.23, 0.69)</td>
<td>0.39 (0.18, 0.60)</td>
</tr>
<tr>
<td>p-value</td>
<td>p=0.001</td>
<td>p &lt;0.001</td>
<td>p &lt;0.001</td>
</tr>
<tr>
<td>Joint protection use (1-6)[13,22]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>115</td>
<td>110</td>
<td>107</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>3.4 (1.1)</td>
<td>4.2 (1.0)</td>
<td>3.5 (1.2)</td>
</tr>
<tr>
<td>Adjusted(^5) mean difference (95% CI)</td>
<td>0.73 (0.52, 0.93)</td>
<td>0.71 (0.48, 0.94)</td>
<td>0.50 (0.27, 0.72)</td>
</tr>
<tr>
<td>p-value</td>
<td>p &lt;0.001</td>
<td>p &lt;0.001</td>
<td>p &lt;0.001</td>
</tr>
<tr>
<td>Carry on working through the pain when doing everyday activities[13,22]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>5 (4)</td>
<td>3 (3)</td>
<td>5 (5)</td>
</tr>
<tr>
<td>Almost never</td>
<td>6 (5)</td>
<td>15 (14)</td>
<td>6 (6)</td>
</tr>
<tr>
<td>Sometimes</td>
<td>29 (25)</td>
<td>35 (32)</td>
<td>37 (35)</td>
</tr>
<tr>
<td>Fairly often</td>
<td>25 (22)</td>
<td>26 (24)</td>
<td>19 (18)</td>
</tr>
<tr>
<td>Very often</td>
<td>36 (31)</td>
<td>18 (16)</td>
<td>28 (26)</td>
</tr>
<tr>
<td>Always</td>
<td>14 (12)</td>
<td>13 (12)</td>
<td>12 (11)</td>
</tr>
<tr>
<td>Chi-square((\chi^2))^4 (d.f.=4)</td>
<td>(\chi^2 = 8.2) (p=0.08)</td>
<td>(\chi^2 = 3.4) (p=0.5)</td>
<td>(\chi^2 = 14.0) (p=0.007)</td>
</tr>
</tbody>
</table>

1 = Analysis categories: “Never”, “Almost never”, “Sometimes”, “Fairly often”, “Very often or always” due to small N
2 = Analysis categories: “Never”, “1-2 times a week”, “3-4 times a week”, “5-6 times a week”, “1-2 times per day” due to small N
3 = Analysis categories: “Never do hand exercises”, “< 5-minutes”, “5-10 minutes”, “10 minutes or more” due to small N
4 = Analysis categories: “Never or almost never”, “Sometimes”, “Fairly often”, “Very often”, “Always” due to small N
5 = Adjusted for the baseline for the outcome of interest and the main effect: No HEx vs HEx
\(\alpha\) = Data not collected at the 3-month time point
Abbreviations: HEx = Hand exercises, JP = Joint protection. CI = confidence interval, d.f. = degrees of freedom. P-values <0.05 are highlighted
Table S5: Treatment effectiveness for primary and secondary outcome measures by main treatment effects – missing data not imputed

<table>
<thead>
<tr>
<th>Outcome measure</th>
<th>3-months</th>
<th>6-months</th>
<th>12-months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No JP†</td>
<td>JP</td>
<td>No HEx†</td>
</tr>
<tr>
<td>OARSI responder criteria (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N (%) meeting responder criteria</td>
<td>16 (14)</td>
<td>23 (22)</td>
<td>20 (18)</td>
</tr>
<tr>
<td>Adjusted odds ratio (95% CI)</td>
<td>1.76 (0.83, 3.73)</td>
<td>0.81 (0.39, 1.67)</td>
<td>2.61 (1.32, 5.15)</td>
</tr>
<tr>
<td>Global assessment of change (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N (%) improved*</td>
<td>36 (31)</td>
<td>38 (35)</td>
<td>26 (23)</td>
</tr>
<tr>
<td>Adjusted odds ratio (95% CI)</td>
<td>1.15 (0.61, 2.17)</td>
<td>2.73 (1.44, 5.18)</td>
<td>3.49 (1.76, 6.92)</td>
</tr>
<tr>
<td>AUSCAN Pain (0-20)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N (%)</td>
<td>116</td>
<td>109</td>
<td>114</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>9.2 (3.4)</td>
<td>9.2 (3.0)</td>
<td>9.5 (3.4)</td>
</tr>
<tr>
<td>Adjusted mean difference (95% CI)</td>
<td>-0.17 (-0.87, 0.53)</td>
<td>-0.26 (-0.95, 0.44)</td>
<td>-0.76 (-1.69, 0.16)</td>
</tr>
<tr>
<td>AUSCAN Stiffness (0-4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N (%)</td>
<td>118</td>
<td>110</td>
<td>114</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>1.5 (1.0)</td>
<td>1.4 (1.0)</td>
<td>1.6 (1.0)</td>
</tr>
<tr>
<td>Adjusted mean difference (95% CI)</td>
<td>0.00 (-0.20, 0.20)</td>
<td>-0.19 (-0.39, 0.01)</td>
<td>-0.22 (-0.45, 0.00)</td>
</tr>
<tr>
<td>AUSCAN Total (0-12)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N (%)</td>
<td>118</td>
<td>108</td>
<td>112</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>15.2 (7.8)</td>
<td>15.0 (6.9)</td>
<td>15.8 (7.8)</td>
</tr>
<tr>
<td>Adjusted mean difference (95% CI)</td>
<td>-1.10 (-2.40, 0.19)</td>
<td>-0.70 (-1.97, 0.57)</td>
<td>-0.79 (-2.33, 0.75)</td>
</tr>
<tr>
<td>Arthritis self-efficacy for pain (1-10)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N (%)</td>
<td>114</td>
<td>110</td>
<td>110</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>5.6 (1.9)</td>
<td>6.3 (1.7)</td>
<td>5.7 (2.0)</td>
</tr>
<tr>
<td>Adjusted mean difference (95% CI)</td>
<td>-0.19 (-0.58, 0.19)</td>
<td>-0.30 (-0.69, 0.08)</td>
<td>-0.47 (-0.97, 0.02)</td>
</tr>
<tr>
<td>Hand pain severity last 3 days (0-10)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N (%)</td>
<td>115</td>
<td>109</td>
<td>119</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>4.4 (2.2)</td>
<td>4.2 (1.9)</td>
<td>4.6 (2.2)</td>
</tr>
<tr>
<td>Adjusted mean difference (95% CI)</td>
<td>-0.30 (-0.77, 0.16)</td>
<td>-0.19 (-0.65, 0.27)</td>
<td>-0.02 (-0.54, 0.51)</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>114</td>
<td>108</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td><strong>Severity of worse problem in the last 3-days (0-10)</strong></td>
<td>Mean (SD)</td>
<td>4.7 (2.3)</td>
<td>4.6 (2.2)</td>
</tr>
<tr>
<td></td>
<td>Adjusted mean difference (95% CI)</td>
<td>-0.24 (-0.76, 0.29)</td>
<td>-0.42 (-0.94, 0.09)</td>
</tr>
<tr>
<td><strong>Satisfaction with hand function in the last 3 days (0-10)</strong></td>
<td>N</td>
<td>115</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td>Mean (SD)</td>
<td>4.7 (2.3)</td>
<td>4.3 (2.2)</td>
</tr>
<tr>
<td></td>
<td>Adjusted mean difference (95% CI)</td>
<td>-0.48 (-1.03, 0.06)</td>
<td>-0.52 (-1.06, 0.02)</td>
</tr>
<tr>
<td><strong>Grip strength (lbs)</strong></td>
<td>N</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Mean (SD)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Adjusted mean difference (95% CI)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Pinch strength (lbs)</strong></td>
<td>N</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Mean (SD)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Adjusted mean difference (95% CI)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Grip ability test (GAT) (seconds)</strong></td>
<td>N</td>
<td>113</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>Mean (SD)</td>
<td>40.7 (10.9)</td>
<td>40.4 (10.2)</td>
</tr>
<tr>
<td></td>
<td>Adjusted mean difference (95% CI)</td>
<td>0.97 (-0.89, 2.84)</td>
<td>0.59 (-1.25, 2.43)</td>
</tr>
<tr>
<td><strong>SF-12: physical component (0-100)</strong></td>
<td>N</td>
<td>113</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>Mean (SD)</td>
<td>50.4 (10.8)</td>
<td>51.5 (9.9)</td>
</tr>
<tr>
<td></td>
<td>Adjusted mean difference (95% CI)</td>
<td>-1.37 (-3.37, 0.63)</td>
<td>0.00 (-1.96, 1.96)</td>
</tr>
</tbody>
</table>

Abbreviations: CI = confidence interval, JP = joint protection, HEx = hand exercise, N/A = not applicable, AUSCAN = Australian Canadian Hand Osteoarthritis Index, SF-12 = Short Form Health Survey 12 (version 2), * = “Improved” defined as “completely better”, “much better”, or “better” on the global assessment of change question; † = Reference category. Results are adjusted for baseline (except for measures derived using the global assessment of change), age, gender, social class, GP practice, length of time with a hand condition and the other main effect of interest. Total AUSCAN score calculated as (pain/5) + stiffness + (function/9)
Table S6: Per-protocol analysis of the primary outcome (OARSI) responder criteria at the primary endpoint (6-month follow-up)

<table>
<thead>
<tr>
<th>Outcome measure</th>
<th>No JP*</th>
<th>JP</th>
<th>No HEx*</th>
<th>HEx</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>109</td>
<td>85</td>
<td>107</td>
<td>87</td>
</tr>
<tr>
<td>&quot;Responders&quot; (OARSI), n (%)</td>
<td>24 (22)</td>
<td>29 (34)</td>
<td>26 (24)</td>
<td>27 (31)</td>
</tr>
<tr>
<td>Adjusted\textsuperscript{a} odds ratio (95% CI)</td>
<td>1.95 (0.94, 4.02)</td>
<td>1.47 (0.73, 2.96)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Footnote: Analysis was defined to be per protocol if participants were in the leaflet and advice arm or attended: session 1, 2, 3 & 4; sessions 1, 2 & 4; sessions 1, 3 & 4; or sessions 1 & 4 for the OT intervention arms. JP = joint protection, HEx = hand exercise, CI = confidence interval. * = reference category