#### **ONLINE SUPPLEMENTARY APPENDIX 6**

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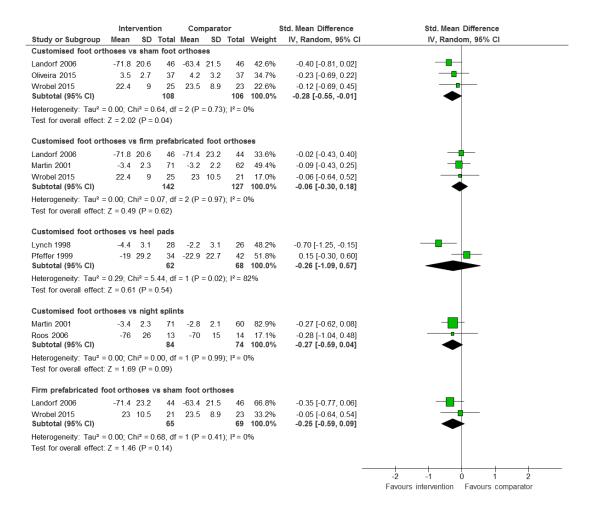
Figure 6. Meta-analysis of data for function in the longer term (13 to 52 weeks)

Figure 1. Meta-analysis of data for pain in the short term (0 to 6 weeks)

|                                   | Inter                  | rventio | n        | Com       | parato               | or       |        | Std. Mean Difference | Std. Mean Difference                                |
|-----------------------------------|------------------------|---------|----------|-----------|----------------------|----------|--------|----------------------|---|
| Study or Subgroup                 | Mean                   | SD      | Total    | Mean      | SD                   | Total    | Weight | IV, Random, 95% CI   | IV, Random, 95% CI                                  |
| Customised foot orth              | oses vs s              | sham f  | oot ort  | hoses     |                      |          |        |                      |   |
| Oliveira 2015                     | 4.4                    | 2.4     | 37       | 4.3       | 3                    | 37       | 55.3%  | 0.04 [-0.42, 0.49]   | <del>-</del>  |
| Wrobel 2015                       | 23.9                   | 8.3     | 25       | 19.1      | 7.5                  | 23       | 44.7%  | 0.60 [0.02, 1.18]    |   |
| Subtotal (95% CI)                 |                        |         | 62       |           |                      | 60       | 100.0% | 0.29 [-0.26, 0.83]   |   |
| Heterogeneity: Tau <sup>2</sup> = | 0.09; Chi <sup>2</sup> | = 2.21  | , df = 1 | (P = 0.1) | 4); l <sup>2</sup> = | 55%      |        |                      |   |
| Test for overall effect:          | Z = 1.03 (             | P = 0.3 | 0)       |           |                      |          |        |                      |   |
| Firm prefabricated fo             | ot orthos              | es vs s | sham f   | oot orth  | oses                 |          |        |                      |   |
| Walther 2013                      | 15.6                   | 14.9    | 10       | 46        | 33.9                 | 10       | 47.0%  | -1.11 [-2.07, -0.15] | <del></del>   |
| Wrobel 2015                       | 22.3                   | 6.5     | 21       | 19.1      | 7.5                  | 23       | 53.0%  | 0.45 [-0.15, 1.05]   |   |
| Subtotal (95% CI)                 |                        |         | 31       |           |                      | 33       | 100.0% | -0.29 [-1.81, 1.24]  |   |
| Heterogeneity: Tau <sup>2</sup> = | 1.05; Chi2             | = 7.31  | , df = 1 | (P = 0.0) | )07); l²             | = 86%    |        |                      |   |
| Test for overall effect:          | Z = 0.37 (             | P = 0.7 | 1)       |           |                      |          |        |                      |   |
| Firm prefabricated fo             | ot orthos              | es vs s | soft pre | fabricat  | ed foo               | ot ortho | ses    |                      |   |
| Rome 2004                         | -54                    | 21.9    | 22       | -62       | 24.1                 | 22       | 65.5%  | 0.34 [-0.25, 0.94]   | <del></del>   |
| Walther 2013                      | 15.6                   | 14.9    | 10       | 20.3      | 20.1                 | 10       | 34.5%  | -0.25 [-1.14, 0.63]  |   |
| Subtotal (95% CI)                 |                        |         | 32       |           |                      | 32       | 100.0% | 0.14 [-0.42, 0.69]   |   |
| Heterogeneity: Tau <sup>2</sup> = | 0.03; Chi <sup>2</sup> | = 1.21  | , df = 1 | (P = 0.2) | 27); l²=             | 17%      |        |                      |   |
| Test for overall effect:          | Z = 0.48 (             | P = 0.6 | 3)       |           |                      |          |        |                      |   |
|                                   |                        |         |          |           |                      |          |        | _                    | -2 -1 0 1 2   |
|                                   |                        |         |          |           |                      |          |        |                      | -2 -1 U 1 2 Favours intervention Favours comparator |
|                                   |                        |         |          |           |                      |          |        |                      | ravours intervention - ravours comparator           |

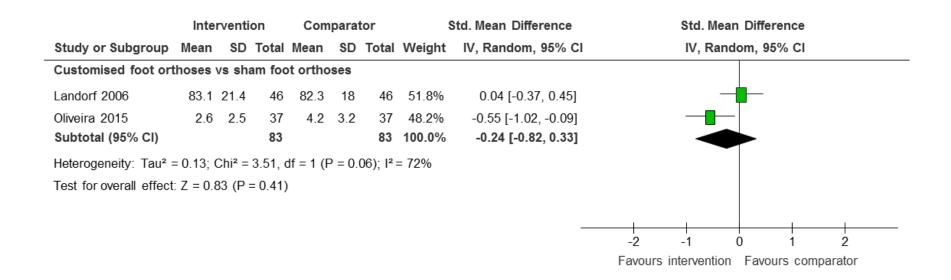
| Study ID                                       |                         | Intervention            |       | Comparator |      |       |  |  |  |
|--|-------------------------|-------------------------|-------|------------|------|-------|--|--|--|
|  | Mean                    | SD                      | Total | Mean       | SD   | Total |  |  |  |
| Customised foot orthoses vs sham foot orthoses |                         |                         |       |            |      |       |  |  |  |
| Oliveira 2015                                  | 4.4                     | 2.4                     | 37    | 4.3        | 3    | 37    |  |  |  |
| Wrobel 2015                                    | 23.9                    | 8.3                     | 25    | 19.1       | 7.5  | 23    |  |  |  |
| Firm prefabricated                             | foot orthoses vs sham   | foot orthoses           |       |            |      |       |  |  |  |
| Walther 2013                                   | 15.6                    | 14.9                    | 10    | 46         | 33.9 | 10    |  |  |  |
| Wrobel 2015                                    | 22.3                    | 6.5                     | 21    | 19.1       | 7.5  | 23    |  |  |  |
| Firm prefabricated                             | foot orthoses vs soft p | refabricated foot ortho | ses   |            |      |       |  |  |  |
| Rome 2004                                      | -54                     | 21.9                    | 22    | -62        | 24.1 | 22    |  |  |  |
| Walther 2013                                   | 15.6                    | 14.9                    | 10    | 20.3       | 20.1 | 10    |  |  |  |

Figure 2. Meta-analysis of data for pain in the medium term (7 to 12 weeks)



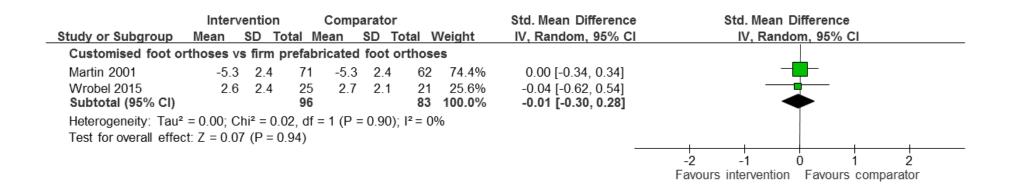
| Study ID             |                 | Intervention  |                 | Comparator |      |       |  |
|----------------------|-----------------|---------------|-----------------|------------|------|-------|--|
|                      | Mean            | SD            | Total           | Mean       | SD   | Total |  |
| <b>Customised fo</b> | ot orthoses vs  | sham foot or  | thoses          |            |      |       |  |
| Landorf 2006         | -71.8           | 20.6          | 46              | -63.4      | 21.5 | 46    |  |
| Oliveira 2015        | 3.5             | 2.7           | 37              | 4.2        | 3.2  | 37    |  |
| Wrobel 2015          | 22.4            | 9             | 25              | 23.5       | 8.9  | 23    |  |
| Customised for       | ot orthoses vs  | firm prefabri | cated foot ortl | noses      |      |       |  |
| Landorf 2006         | -71.8           | 20.6          | 46              | -71.4      | 23.2 | 44    |  |
| Martin 2001          | -3.4            | 2.3           | 71              | -3.2       | 2.2  | 62    |  |
| Wrobel 2015          | 22.4            | 9             | 25              | 23         | 10.5 | 21    |  |
| Customised for       | ot orthoses vs  | heel pads     |                 |            |      |       |  |
| Lynch 1998           | -4.4            | 3.1           | 28              | -2.2       | 3.1  | 26    |  |
| Pfeffer 1999         | -19             | 29.2          | 34              | -22.9      | 22.7 | 42    |  |
| <b>Customised fo</b> | ot orthoses vs  | night splints |                 |            |      |       |  |
| Martin 2001          | -3.4            | 2.3           | 71              | -2.8       | 2.1  | 60    |  |
| Roos 2006            | -76             | 26            | 13              | -70        | 15   | 14    |  |
| Firm prefabrica      | ated foot ortho | ses vs sham   | foot orthoses   |            |      |       |  |
| Landorf 2006         | -71.4           | 23.2          | 44              | -63.4      | 21.5 | 46    |  |
| Wrobel 2015          | 23              | 10.5          | 21              | 23.5       | 8.9  | 23    |  |

Figure 3. Meta-analysis of data for pain in the longer term (13 to 52 weeks)



| Study ID                    |  | Intervention |       | Comparator |     |       |  |  |  |  |  |
|-----------------------------|--|--------------|-------|------------|-----|-------|--|--|--|--|--|
|                             | Mean   | SD           | Total | Mean       | SD  | Total |  |  |  |  |  |
| <b>Customised foot orth</b> | Customised foot orthoses vs sham foot orthoses |              |       |            |     |       |  |  |  |  |  |
| Landorf 2006                | 83.1   | 21.4         | 46    | 82.3       | 18  | 46    |  |  |  |  |  |
| Oliveira 2015               | 2.6  | 2.5          | 37    | 4.2        | 3.2 | 37    |  |  |  |  |  |

Figure 4. Meta-analysis of data for 'first step' pain in the medium term (7 to 12 weeks)



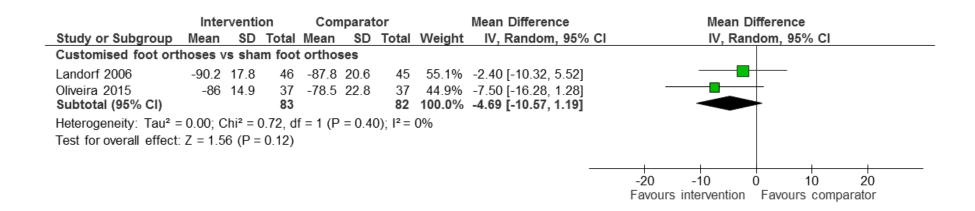
| Study ID                   |  | Intervention |       | Comparator |     |       |  |  |  |  |
|----------------------------|--|--------------|-------|------------|-----|-------|--|--|--|--|
|                            | Mean   | SD           | Total | Mean SD    |     | Total |  |  |  |  |
| <b>Customised foot ort</b> | Customised foot orthoses vs firm prefabricated foot orthoses |              |       |            |     |       |  |  |  |  |
| Martin 2001                | -5.3   | 2.4          | 71    | -5.3       | 2.4 | 62    |  |  |  |  |
| Wrobel 2015                | 2.6  | 2.4          | 25    | 2.7        | 2.1 | 21    |  |  |  |  |

Figure 5. Meta-analysis of data for function in the medium term (7 to 12 weeks)

|                                   | Inte      | rventio               | n         | Con      | nparat               | or    |        | Std. Mean Difference | Std. Mean Difference                    |
|-----------------------------------|-----------|-----------------------|-----------|----------|----------------------|-------|--------|----------------------|---|
| Study or Subgroup                 | Mean      | SD                    | Total     | Mean     | SD                   | Total | Weight | IV, Random, 95% CI   | IV, Random, 95% CI                      |
| Customised foot orth              | noses vs  | sham                  | foot or   | thoses   |                      |       |        |                      |   |
| Landorf 2006                      | -84.1     | 19.9                  | 46        | -79.7    | 22.3                 | 45    | 42.0%  | -0.21 [-0.62, 0.21]  | <del></del>                             |
| Oliveira 2015                     | -81.4     | 18.2                  | 37        | -73.3    | 25.5                 | 37    | 33.8%  | -0.36 [-0.82, 0.10]  | <del></del>                             |
| Wrobel 2015                       | -24.9     | 12.2                  | 26        | -24.7    |                      | 26    | 24.2%  | 0.02 [-0.53, 0.56]   | <del></del>                             |
| Subtotal (95% CI)                 |           |                       | 109       |          |                      | 108   | 100.0% | -0.21 [-0.47, 0.06]  | •                                       |
| Heterogeneity: Tau <sup>2</sup> = | 0.00; Chi | i <sup>2</sup> = 1.08 | 8, df = 1 | 2 (P = 0 | .58); I <sup>2</sup> | = 0%  |        |                      |   |
| Test for overall effect:          | Z = 1.51  | (P = 0.               | 13)       |          |                      |       |        |                      |   |
| Customised foot orth              | noses vs  | firm pi               | refabrio  | cated fo | ot ort               | hoses |        |                      |   |
| Landorf 2006                      |           | 19.9                  | 46        |          |                      | 44    | 63.8%  | -0.11 [-0.52, 0.31]  | — <del>—</del>                          |
| Wrobel 2015                       | -24.9     | 12.2                  | 26        | -24.7    | 9.5                  | 25    | 36.2%  | 0.02 [-0.53, 0.57]   | <del></del>                             |
| Subtotal (95% CI)                 |           |                       | 72        |          |                      | 69    | 100.0% | -0.06 [-0.39, 0.27]  | •                                       |
| Heterogeneity: Tau <sup>2</sup> = | 0.00; Chi | i <sup>2</sup> = 0.13 | 3, df =   | 1 (P = 0 | .72); I <sup>2</sup> | = 0%  |        | - / -                |   |
| Test for overall effect:          |           |                       |           | •        |                      |       |        |                      |   |
| Firm prefabricated fo             | ot ortho  | ses vs                | sham      | foot ort | hoses                |       |        |                      |   |
| Landorf 2006                      |           | 22.8                  |           | -79.7    |                      | 45    | 63.6%  | -0.09 [-0.51, 0.32]  | <b>—</b>                                |
| Wrobel 2015                       | -24.7     |                       | 25        |          |                      | 26    | 36.4%  | 0.00 [-0.55, 0.55]   | <del></del>                             |
| Subtotal (95% CI)                 |           |                       | 69        |          |                      | 71    | 100.0% | -0.06 [-0.39, 0.27]  | •                                       |
| Heterogeneity: Tau <sup>2</sup> = | 0.00: Chi | $i^2 = 0.0$           | 7. df =   | 1 (P = 0 | .79): I²             | = 0%  |        | - / -                |   |
| Test for overall effect:          |           |                       |           | `        | ,,                   |       |        |                      |   |
|                                   |           | ,                     | ,         |          |                      |       |        |                      |   |
|                                   |           |                       |           |          |                      |       |        |                      |   |
|                                   |           |                       |           |          |                      |       |        |                      | -2 -1 0 1 2                             |
|                                   |           |                       |           |          |                      |       |        |                      | Favours intervention Favours comparator |

| Study ID           |                         | Intervention        |       | Comparator |      |       |  |
|--------------------|-------------------------|---------------------|-------|------------|------|-------|--|
|                    | Mean                    | SD                  | Total | Mean       | SD   | Total |  |
| Customised foot or | thoses vs sham foot or  | thoses              |       |            |      |       |  |
| Landorf 2006       | -84.1                   | 19.9                | 46    | -79.7      | 22.3 | 45    |  |
| Oliveira 2015      | -81.4                   | 18.2                | 37    | -73.3      | 25.5 | 37    |  |
| Wrobel 2015        | 24.9                    | 12.2                | 26    | 24.7       | 12.4 | 26    |  |
| Customised foot or | thoses vs firm prefabri | cated foot orthoses |       |            |      |       |  |
| Landorf 2006       | -84.1                   | 19.9                | 46    | -81.8      | 22.8 | 44    |  |
| Wrobel 2015        | 24.9                    | 12.2                | 26    | 24.7       | 9.5  | 25    |  |
| Firm prefabricated | foot orthoses vs sham   | foot orthoses       |       |            |      |       |  |
| Landorf 2006       | -81.8                   | 22.8                | 44    | -79.7      | 22.3 | 45    |  |
| Wrobel 2015        | 24.7                    | 9.5                 | 25    | 24.7       | 12.4 | 26    |  |

Figure 6. Meta-analysis of data for function in the longer term (13 to 52 weeks)



| Study ID                                       |       | Intervention |       | Comparator |      |       |  |  |  |
|--|-------|--------------|-------|------------|------|-------|--|--|--|
|  | Mean  | SD           | Total | Mean SD    |      | Total |  |  |  |
| Customised foot orthoses vs sham foot orthoses |       |              |       |            |      |       |  |  |  |
| Landorf 2006                                   | -90.2 | 17.8         | 46    | -87.8      | 20.6 | 45    |  |  |  |
| Oliveira 2015                                  | -86   | 14.9         | 37    | -78.5      | 22.8 | 37    |  |  |  |