**Supplementary Table 2**  Kinematic parameters averaged over series elastic element (SEE) sub-phases and to the time-point of peak SEE length ($l_{\text{SEE}}$)

| Parameters                        | Stance sub-phase or time-point | Affected | Unaffected | Diff | 95% CI       | Test statistic | P    | Cohen’s $d_z$ |
|-----------------------------------|--------------------------------|----------|------------|------|--------------|----------------|------|---------------|
|                                   |                               | M  SD    | M  SD      | M   SD |              |                |      |               |
| Ankle joint angle ($^\circ$)      | SEE lengthening                | 1  2     | 2  2       | 0   2  | -2 to 1      | t(8) = 0.52    | 0.620| 0.17          |
|                                   | peak $l_{\text{SEE}}$          | 6  3     | 5  3       | 2   3  | 0 to 4       | t(8) = 1.84    | 0.103| 0.61          |
|                                   | SEE shortening                 | -8  2    | -11  3     | 3   4  | 0 to 6       | t(8) = 2.34    | 0.048| 0.78          |
|                                   | SEE shortening                 | -8  2    | -11  3     | 3   4  | 0 to 6       | t(8) = 2.34    | 0.048| 0.78          |
|                                   | SEE shortening                 | -8  2    | -11  3     | 3   4  | 0 to 6       | t(8) = 2.34    | 0.048| 0.78          |
|                                   | SEE shortening                 | -8  2    | -11  3     | 3   4  | 0 to 6       | t(8) = 2.34    | 0.048| 0.78          |
| Ankle joint angular velocity ($^\circ\cdot$s$^{-1}$) | SEE lengthening                | -25.1  7.6 | -26.3  6.1 | 1.2  8.9 | -5.6 to 8.1  | t(8) = 0.41    | 0.694| 0.14          |
|                                   | peak $l_{\text{SEE}}$          | -210  57 | 231  32    | 21  52 | -19 to 60    | t(8) = 1.19    | 0.267| 0.40          |
|                                   | SEE shortening                 | -315  40 | -320  26   | 5   30  | -17 to 28    | t(8) = 0.55    | 0.600| 0.18          |

M, mean; SD, standard deviation; CI, confidence interval.